COUNTY COUNCIL OF FIFE.

ANNUAL REPORT

ON THE

HEALTH AND SANITARY CONDITION OF THE COUNTY AND DISTRICTS

DURING

1933

BY

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M.D., F.R.C.P., B.Sc. (Pub. Health), Edin.
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CONTENTS.

To the County Council of the County of Fife.

Iy Lord, Ladies and Gentlemen,

I have the honour to submit the Annual Report on the Health nd Sanitary condition of the County for 1933.

Included is the Report on the Medical Inspection of School Children or the year ending July 1932.

In the Report for 1931 I commented that the incidence of infectious liseases was never less. In that of 1932 I observed that our freedom in his respect had been broken in the last two months of that year by a eavy incidence of scarlet fever. There remains to add of 1933 that he incidence of scarlet fever was never more. Fortunately, and thanks o the good offices and exceptionally hard work of the nursing staffs f the County Fever Hospitals, I was able to secure hospital treatment or every patient needing it.

The birth-rate of the County District (Landward Area and Small Burghs) was 17·2 per 1,000 as compared with 17·0 for the similar rea of Scotland.

The death-rate was 12·3 per 1,000 : that for the like area of Scotladn vas 13·1.

The infantile mortality rate was 70, a very definite improvement n that of 80 recorded in 1932. The infantile mortality rate for the ke area of Scotland was 71.

The death rate from tuberculosis was 0·47 per 1,000, that from pul- nonary tuberculosis being 0·34 per 1,000. The rates for Scotland ere 0·62 and 0·45 respectively. The County death rate from this ause may therefore be regarded as comparatively satisfactory.

The housing activity of the Department, in addition to that relative o infectious disease, was in 1933 at its maximum.

I desire again to thank my colleagues of the Department for their illing and competent help throughout the year.

I have the honour to be,

My Lord, Ladies and Gentlemen,

Your obedient Servant,

G. PRATT YULE,

County Medical Officer.

uly, 1934.

Public Health Department,
Cupar, Fife.

STAFF.

County Medical Officer of Health.

G. PRATT YULE, M.D., F.R.C.P.E., B.Sc. (Publi Health).

Deputy County Medical Officers.

Health Service—

G. M. McGILLIVRAY, M.C., M.B., Ch.B., D.P.H.
G. MATTHEW FYFE, M.B., Ch.B., D.P.H.

Welfare Service—

R. A. KRAUSE, M.D., D.Sc., D.P.H.

Executive Tuberculosis Officer.

ALEX. LUNDIE, B.Sc., M.B., Ch.B., D.P.H.

Area Medical Officers.

JOHN COMRIE, M.B., Ch.B., F.R.C.S.(Ed.).
R. H. DAWSON, M.B., Ch.B., D.P.H.
G. A. H. GUMLEY, M.B., Ch.B., D.P.H., M.R.C.P.I
A. SHEILA MACLEOD, M.B., Ch.B., D.P.H.
JOHN THOMSON, M.B., Ch.B., D.P.H.

County Sanitary Inspectors.

C. A. ALEXANDER.
T. L. BROWN.
WILLIAM DAVIDSON.
ALEX. FORREST.
MARSHALL GORRIE.
ROBERT JUST.
ALEX. LUMSDEN.
J. S. E. RIDDLE.
JOHN ROSS.
ANDREW STEWART.
R. J. WIGSTON.

Medical Officers, Venereal Diseases Treatment Centres.

Dunfermline—

G. A. H. GUMLEY, M.B., Ch.B., D.P.H., M.R.C.P..

Kirkcaldy—

G. WISHART McINTOSH, M.B., C.M., B.Sc. (Pub Health).

COUNTY OF FIFE.

Report by County Medical Officer for the Year 1933.

POPULATION.

The population of the County of Fife, exclusive of the large burghs Dunfermline and Kirkcaldy, is estimated to the middle of 1933 by ıe Registrar-General at 200,132, an increase of 2,696 on the popula- on of 197,436 at the Census of 1931.

The population of the Landward Area is estimated at 102,375 and ıat of the small burghs, twenty-three in number, at 97,757.

BIRTHS.

During 1933 there were registered within the County, exclusive of ıe two large burghs, 3,448 births (corrected) of which 1,801 were ale and 1,647 were female. Thus, 109·35 males were born to every)0 females. The birth rate per 1,000 estimated population was 17·2. he illegitimate births numbered 210, or 6·1 per cent. of the total rths.

In 1931 and 1932 there were 3,608 and 3,523 births respectively, gures which, in comparison with that of 1933, are indicative of the)ntinual fall of the birth rate.

MARRIAGES.

The marriages registered in the County, exclusive of the large burghs, as 1,239 (Landward Area 616, Small Burghs 623), equivalent to a arriage-rate of 6·2 per 1,000 estimated population. There were 67 ore marriages in 1933 than in 1932.

GENERAL MORTALITY.

The number of deaths, corrected for transfers, allocated to the County (exclusive of large burghs) was 2,464, equivalent to a death rate of 12·3 per 1,000 estimated population. There were 86 more deaths in 1933 than in 1932.

The number of deaths in the Landward Area was 1,221 and in the Small Burghs 1,243, the respective death-rates being 11·9 and 12·8 per 1,000 estimated population.

In 1932 there were 1,200 deaths in the Landward Area and 1,178 in the Small Burghs, the respective death rates being 11·6 and 12·4 per 1,000 estimated population.

The summary of the causes of death in the Landward Area and Small Burghs in 1933 is given in the subscribed Table. The commonest causes of death were :—Diseases of the Circulatory System, 462 ; Cerebral Haemorrhage and other diseases of the Nervous System, 338 ; Infectious and Parasitic Diseases, 322 ; Diseases of the Respiratory System, 289 (Bronchitis and Pneumonia, etc.) ; and Cancer and Malignant Disease, 275. Compared with 1932, the number of deaths during the first five years of life is less, being 13·5 per cent. of the total mortality in 1933 as against 16·7 per cent. in the previous year.

CAUSES OF DEATH. LANDWARD AREA AND SMALL BURGHS, 1933.

Cause of Death.	All Ages.			—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	85—
	Both Sexes	Males	F'm'l's												
Infectious and Parasitic Diseases, ..	322	163	159	30	33	20	12	35	37	29	29	23	44	23	7
Cancer and Malignant Disease	275	124	151	1	..	..	..	4	7	16	40	73	75	52	7
Diabetes Mellitus	41	12	29	..	..	..	..	1	1	2	4	6	20	7	..
Other General Diseases: Chronic Poisonings	67	19	47	2	2	4	2	4	2	14	12	10	10	4	1
Cerebral Haemorrhage and Other Diseases of Nervous System, ...	338	158	180	10	7	3	3	3	5	10	23	53	100	101	20
Diseases of Circulatory System, ...	462	244	218	..	..	3	5	6	16	14	29	95	140	125	29
Diseases of Respiratory System, ...	289	164	125	46	26	2	2	6	4	16	26	30	61	53	17
Diseases of Digestive System, ...	133	64	69	20	6	3	3	3	9	11	21	21	22	14	..
Diseases of Genito-urinary System, ..	98	62	36	1	3	1	..	2	4	5	11	19	31	19	2
Diseases of Pregnancy and Childbirth, ..	19	..	19	..	..	..	..	3	8	8	..	..	..	..	..
Diseases of Skin and Locomotor System, ..	16	6	10	..	2	1	..	..	2	1	2	5	..	3	..
Congenital Debility, Premature Birth, Malformations, etc., ...	127	72	55	125	1	..	1	..	..	..	..	..	..	..	..
Senility, ...	110	42	68	..	..	..	..	..	..	..	..	..	19	63	28
Suicide, ...	15	9	6	..	..	..	..	1	3	3	3	2	3	..	..
Other Violence, ...	123	86	37	5	12	8	8	14	11	12	7	16	11	17	2
Ill-defined Causes, ...	29	20	9	2	..	..	..	..	1	1	2	4	15	4	..
All Causes	2,464	1,245	1,219	242	92	45	36	82	110	142	209	357	551	485	113
Percentage	100·0	50·5	49·5	9·8	3·7	1·8	1·4	3·3	4·5	5·7	8·5	14·5	22·3	19·7	4·8

INFANTILE MORTALITY.

The deaths of infants under one year of age in the Landward Area and Small Burghs in 1933 numbered 242 (male 144, female 98), equivalent to an infantile mortality rate of 70. In 1932, the infantile mortality rate was 80 ; in 1931, the rate was 73.

The deaths of infants in 1933 in the Landward Area were 146 and in the Small Burghs 96, the infantile mortality rates being 74·5 and 64·5 respectively.

The causes of death of infants were :—scarlet fever 1 ; whooping cough 15 ; influenza 9 ; other epidemic diseases 2 ; other diseases of nervous system 10 ; bronchitis 13 ; pneumonia 33 ; diarrhoea 15 ; other digestive diseases 5 ; nephritis 1 ; congenital debility, prematurity and malformations 125 ; other violence 5 ; and causes ill-defined or unknown 2.

The more frequent and important causes to which infant deaths were attributed in 1933 were :—whooping cough 15 ; influenza 9 ; bronchitis and pneumonia 46 ; diarrhoea 15 ; and congenital debility 125 ; the latter being responsible for 51·6 of the total mortality under one year of age.

Compared with 1932, the infant deaths are 40 less. The chief factors of the mortality remain the same and the observations made thereon in previous Reports apply.

PRINCIPAL EPIDEMIC DISEASES.

The deaths from these diseases were 220 in 1933 as compared with 150 in 1932 and 136 in 1931.

The prevalence of influenza during 1933 was the main factor in the increase, this disease being responsible for 140 deaths compared with 54 in 1932. Resulting from the epidemic prevalence of scarlet fever throughout the year, the disease being more severe in type than for some years past, 22 deaths were recorded in 1933 as compared with 6 in 1932. Whooping cough maintained its routine toll, there being 28 deaths (24 in 1932). No death was recorded from measles in 1933.

Deaths—Principal Epidemic Diseases, 1933.

Disease.	Landward Area.	Small Burghs.	Total.
Typhoid Fever, ...	2	..	2
Scarlet Fever, ...	14	8	22
Whooping Cough, ...	15	13	28
Diphtheria, ...	4	4	8
Influenza, ...	74	66	140
Cerebro-Spinal Fever, ...	6	3	9
Other Epidemic Diseases, ..	6	5	11
Total, ...	121	99	220
Rate per 1,000 Estimated Population,	1·2	1·0	1·10

DEATHS FROM TUBERCULOSIS.

The number of deaths from tuberculosis in the Landward Area and Small Burghs was in 1933 95, equivalent to a death rate of 0·47 per 1,000 estimated population. The deaths in the Landward Area numbered 41 (death rate 0·40) and in the Small Burghs 54 (death rate 0·55).

In 1932 the deaths from tuberculosis numbered 128. For a year or two past, the tuberculosis deaths have been approximately stationary in number. The marked decrease in the number of these deaths in 1933 may possibly herald a further fall in mortality from this cause.

Deaths from Tuberculosis, 1933—Landward and Small Burghs.

Area.	All Tuberculosis.		Pulmonary.		Non-Pulmonary.	
	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000
Landward and Small Burghs, ..	95	0·47	68	0·34	27	0·13
Landward, ..	41	0·40	28	0·27	13	0·13
Small Burghs, ..	54	0·55	40	0·41	14	0·14

The numbers and age distribution of the deaths from pulmonary and other forms of tuberculosis is shown below :—

Deaths from Tuberculosis, 1933.

Tuberculosis.	Under 5 years.	5-15	15-25	25-35	35-45	45-55	55 and over.	Total.
Pulmonary ..	..	3	16	19	9	7	14	68
Other Tb. Dis.	6	6	5	5	3	..	2	27
Total ..	6	9	21	24	12	7	16	95

DEATHS FROM CANCER.

The deaths from cancer and malignant disease were 275 (male 124, female 151), equivalent to a death rate of 1·37 per 1,000. The deaths in the Landward Area numbered 119 and in the Small Burghs 156.

In 1932, the deaths from cancer were 284. The year 1933 is the first year no increase in cancer deaths over the total of the previous year has been recorded.

Research for the cause and cure of cancer, although general for long throughout the world, has not yet been attended with success. Some advance has recently been made regarding the conditions determining the disease arising from employment in certain industries, and the

outlook generally for the numerous scientific workers engaged in the research seems more hopeful at present than has hitherto been the case.

There has, however, been very definite progress in the curative treatment of the disease by radiation and it becomes increasingly evident that cancer can be cured by surgery, by radiation, or partly by one and partly by the other provided, like certain other diseases, it comes to knowledge sufficiently early and is treated at once and without a moment's delay.

Unfortunately, in its earliest stages, and particularly when it has its origin in the internal organs, cancer is often painless and gives little or no warning of its presence.

It is essential if any reduction is to be made in the steadily increasing annual toll of cancer deaths that the layman should learn the warning manifestations of the disease.

" It is unnecessary and may be harmful to attempt to proclaim widely a full description of the signs, symptoms and relative mortality of cancer in its many situations and manifestations. . . . All that is needed, and the need is urgent, is that the individual should be told to realise that any CHANGE, any departure in habit or form in the body which has served him well in the past, should be regarded as potentially serious and calls for advice. The persistence of a small ulcer in a person who has hitherto healed naturally, a lump where no lump should be, a blood-stained discharge where nothing of the kind has previously been noticed, an unexplained and unresponding hoarseness. . . ." These and other changes which the patient has himself recognised as abnormal should determine consultation with his family doctor forthwith.

" Above all, it should be widely taught that these changes are of especial importance if they are free from pain, an observation which is invariably made and almost invariably misconstrued." (J. J. M. Shaw, F.R.C.S., Cancer Control Organisation for Edinburgh and South-East Scotland.)

DEATHS FROM DISEASES OF RESPIRATORY SYSTEM.

The deaths from these diseases numbered 289 (male 164, female 125), equivalent to a death rate of 1·44 per 1,000. Of the total, 118 deaths were ascribed to bronchitis, 127 to pneumonia and 44 to other respiratory diseases.

The deaths in the Landward Area numbered 132 and in the Small Burghs 157, corresponding to death rates of 1·3 and 1·6 per 1,000 respectively.

Bronchitis and pneumonia are infective diseases and their incidence, like other infectious diseases is heavy on the young. Seventy-two deaths or 25 per cent. of the total deaths from diseases of the respiratory

system in 1933 were those of children less than five years of age. Doubtless matters will improve with better education in hygiene and appreciation of the fact that pure air is every whit as important and valuable in the safeguarding of health and prevention of disease as pure water. The provision of new housing by the County Council will contribute in considerable measure towards this end.

DEATHS FROM DISEASES OF PREGNANCY AND CHILDBIRTH.

The number of deaths from these causes in the Landward Area and Small Burghs in 1933 was 19 (puerperal sepsis 6, other puerperal causes 11), the death rate being 0·09 per 1,000 estimated population. In 1932, there were 17 deaths from these causes.

The deaths in the Landward Area in 1933 numbered 11 (puerperal sepsis 4, other puerperal causes 7), and in the Small Burghs 8 (puerperal sepsis 2, other puerperal causes 6). Special inquiry is made respecting all such deaths and it would appear that the attention and criticism directed to their frequency is possibly tending towards improvement. During the two years 1930-31, the deaths of women from these diseases were 51 : during the years 1932-33 the number diminished to 36.

DEATHS FROM VIOLENCE.

There were 138 deaths from violence (suicide 15, other violence 123), corresponding to a mortality rate of 0·7 per 1,000. The deaths in the Landward Area numbered 78 (suicide 5, other violence 73), and in the Small Burghs 60 (suicide 10, other violence 50).

The deaths from these causes were 143 in 1930, 135 in 1931 and 119 in 1932.

SMALL BURGHS—VITAL RETURNS.

The attached table sets forth the more important figures for each of the twenty-three small burghs of the County.

SMALL BURGHS—VITAL RETURNS, 1933.

BURGH.	Population (estimated)	Births (corrected)	Mar'ges (registered)	Deaths (corrected)	Infant Deaths	Tuber. Deaths		Deaths from Prin. Epidemic Dis.	Deaths from Cancer	Deaths from Puerperal Sepsis.	Deaths from Other Puerperal Causes	Deaths from Respiratory Diseases
						Pulm.	Non-Pul					
Auchtermuchty ..	1,247	13	9	26	1	..	..	4	3	..	..	2
Buckhaven	18,032	356	130	205	30	8	..	22	26	..	2	28
Burntisland	5,437	61	26	67	3	3	2	6	13	..	..	6
Cowdenbeath	12,772	236	84	119	12	5	..	10	13	1	..	19
Crail	1,054	3	8	17	..	..	..	2	3	..	..	3
Culross	522	8	12	10	1	..	..	..	2	..	..	2
Cupar	4,727	65	36	70	4	1	1	5	8	..	..	7
Elie-Earlsferry ..	984	5	8	17	..	..	..	..	5	..	..	1
Falkland	844	7	12	12	..	1	..	..	1	..	..	1
Inverkeithing	3,317	52	15	49	5	5	1	5	3	..	1	9
Kinghorn	1,923	24	11	31	2	1	1	2	1	..	..	4
Kilrenny-Anstruther ..	3,342	49	18	45	2	2	..	4	4	..	..	5
Ladybank	1,170	12	3	23	..	..	..	2	3	..	..	..
Leslie	2,509	35	27	26	4	..	..	2	3	..	1	3
Leven	7,619	121	45	89	5	1	2	10	17	..	1	11
Lochgelly	9,334	178	64	111	12	2	1	11	10	1	1	18
Markinch	2,130	38	19	17	2	1	..	1	1	..	..	1
Newburgh	2,170	36	12	39	4	3	2	2	4	..	..	4
Newport	3,274	23	22	47	1	3	..	2	7	..	..	8
Pittenweem	1,685	19	3	17	2	1	2	..	..	..	..	1
St. Andrews	8,697	90	39	120	1	2	2	3	12	..	..	11
St. Monance	1,690	17	3	28	1	..	..	2	6	..	..	3
Tayport	3,278	41	17	58	4	1	..	4	11	..	..	10
All Small Burghs ..	97,757	1,489	623	1,243	96	40	14	99	156	2	6	157

The births (corrected) for 1933 in the twenty-three burghs were 1,489, equivalent to a birth rate of 15·2 per 1,000. In 1932 there were 1,542 births ; in 1931 there were 1,673 and in 1930, there were 1,713 births.

The marriages in 1933 numbered 623, equivalent to a marriage rate of 6·4 per 1,000. There were 591 marriages in 1932, 505 in 1931 and 568 in 1930—numbers which appear indicative in some measure of the financial circumstances of the times.

The number of deaths, corrected for transfers, was 1,243, equivalent to a death rate of 12·8 per 1,000. In 1932, there were 1,178 deaths.

The natural increase of the population (balance of births over deaths) was 246 in 1933 as compared with 364 in 1932, 510 in 1931 and 562 in 1930.

Infant deaths numbered 96, the infantile mortality rate being 64·5 as compared with 111 deaths and a rate of 72 in 1932. Infant deaths in 1931 were 119 and in 1930, 121 in number. There has been a substantial fall in the rate of infantile mortality since 1930.

There were 54 deaths from tuberculosis (pulmonary 40, non-pulmonary 14) in 1932, the death rate being 0·55 per 1,000 (pulmonary 0.41, non-pulmonary 0·14). In 1932 there were 70 tuberculosis deaths, the death rate being 0·73 per 1,000.

Deaths attributed to cancer numbered 156 as compared with 144 in 1932.

The number of deaths from puerperal sespis and other puerperal causes was 8 in 1933 as compared with 5 in 1932 and 8 in 1931.

There were 157 deaths from diseases of the respiratory system in 1933, an increase of 48 on the return of 1932, attributable, in the main, to the higher prevailing mortality from influenza and scarlet fever.

Vital rates based on the individual figures of small burghs, that is, burghs of less than 20,000 population, are subject to great variation and consequently are not trustworthy.

The following figures show certain rates per 1,000 estimated population for the larger small burghs of the County :—Buckhaven—birth rate 19·7 ; marriage rate 7·2 ; death rate 11·4 ; tuberculosis death rate 0·44 ; and infantile mortality rate 84.

Cowdenbeath—birth rate 18·5 ; marriage rate 6·6 ; death rate 9·3 ; tuberculosis death rate 0·39 ; and infantile mortality rate 51.

Lochgelly—birth rate 19·0 ; marriage rate 6·9 ; death rate 11·2 ; tuberculosis death rate 0·32 ; and infantile mortality rate 67.

St. Andrews—birth rate 10·3 ; marriage rate 4·5 ; death rate 13·8 ; tuberculosis death rate 0·46 ; and infantile mortality rate 11.

NOTIFICATION OF INFECTIOUS DISEASE.

The number of persons in the Landward Area and Small Burghs notified in 1933 as suffering from notifiable infectious diseases was 3,649, of whom 2,737 or 75 per cent. were removed for treatment in hospital. In 1932, the number of persons notified was 3,895, of whom 1,657 or 42·5 per cent. were treated in hospital : in 1931, notifications numbered 2,724, 39·3 per cent. being admitted to hospital.

The number of patients removed for hospital treatment in 1933 reached the high figure of 75 per cent. as a result of the persistence throughout the year of epidemic scarlet fever. Patients suffering from scarlet fever numbered 2,207 or 60·5 per cent. of the total notifications. The number of patients suffering from scarlet fever removed for hospital treatment was 2,174 or 97·3 per cent. of the total cases of scarlet fever.

The patients notified in 1933 comprised :—typhoid fever 6, scarlet fever 2,207, diphtheria 223, erysipelas 212, puerperal fever 19, ophthalmia neonatorum 102, malaria 1, dysentery 4, acute poliomyelitis (infantile paralysis) 3, encephalitis lethargica (sleepy sickness) 5, acute primary pneumonia 300, acute influenzal pneumonia 175, puerperal pyrexia 19, cerebro-spinal fever 4, pulmonary tuberculosis 153 and non-pulmonary tuberculosis 206.

Of the total of 3,895 notifications in 1932, 1,439 were cases of chickenpox which ceased to be notifiable at the end of that year. The notifications in 1933 exceeded those of 1932 by 1,193 cases, the chief factor in the excess being scarlet fever which continued in epidemic prevalence throughout 1933, the cases exceeding those of 1932 by 1,088. The notifications of diphtheria, erysipelas, primary pneumonia and influenzal pneumonia were in excess of those of 1932 but the notifications of tuberculosis were 67 less.

The rapid increase in the incidence of scarlet fever which began in November 1932 continued in epidemic prevalence throughout 1933. For over twenty years there had been no undue spread of scarlet fever throughout the landward population and that of the small burghs of Central and Eastern Fife and the presence of the infection of scarlet found a ready vidus in the child, adolescent and younger adult population. The infection was apparently spread by direct personal contact and was as rife during holidays as when the schools were in session. A particular watch was kept on dairy farms where the disease occurred but no cases arising from infected milk came to knowledge.

As the epidemic continued, the type of the infection became acute in numerous cases and occasionally appeared severe and somewhat reminiscent of the virulent cases that were the routine thirty-five years ago. The number of deaths recorded during the year was 22, equivalent to a case mortality of one per cent.

The closure of schools, in whole or part, with a view to the limitation or prevention of the spread of infectious disease was not deemed necessary during 1933.

PUBLIC HEALTH (SCOTLAND) AMENDMENT ACT, 1925.

In accordance with the terms of the scheme under the provisions of the above Act operating throughout the Landward Area and Small Burghs, twenty-six patients suffering from diabetes were supplied with insulin at a cost of £90 18s 8d to the County Council. Eleven patients refunded the cost of insulin supplied in whole or part. The cost of food granted as special diet to certain diabetic patients unable to provide it for themselves was £36 1s 1½d.

TUBERCULOSIS SCHEME.

The scheme extends to the Landward Area and all Small Burghs and is administered by the County Council as Public Health Local Authority on the lines described in former Reports.

In 1933, the number notified as suffering from tuberculosis throughout the Landward Area and Small Burghs was 359, of whom 153 were pulmonary and 206 were non-pulmonary tuberculosis. In 1932, the notifications numbered 426, of which 196 were pulmonary and 230 were non-pulmonary tuberculosis, there having been a steady increase in the number of notifications received since 1928 when the total was 276 (122 pulmonary, 154 non-pulmonary). The reduction in the number of notifications for 1933 is therefore substantial and possibly it may continue in view of improving economic conditions.

In 1933 the notifications from the Landward Area numbered 168 (pulmonary 69, non-pulmonary 99), and from the Small Burghs 191 (pulmonary 84, non-pulmonary 107). The number of Landward patients sent to Glenlomond Sanatorium for treatment was 69 and from the Small Burghs 75.

The admission to Glenlomond Sanatorium of 191 patients was arranged during the year from the following areas :—

Landward.—St. Andrews District, 5 ; Cupar District, 14 ; Dunfermline District, 20 ; Kirkcaldy District, 30.

Burghal.—Inverkeithing, 5 ; Leven, 2 ; Newport, 3 ; Buckhaven, 24 ; Cowdenbeath, 11 ; Burntisland, 5 ; Cupar, 6 ; Lochgelly, 9 ; Newburgh, 3 ; Kinghorn, 1 ; Pittenweem, 1 ; Tayport, 2 ; St. Andrews 2 ; Anstruther, 1.

In addition ten patients were admitted from Kinross County and 37 from areas outwith the County of Fife.

Domiciliary Treatment.—During the year additional nourishment was supplied to 98 patients at a total cost of £258 10s 8d or £2 13s 9d per patient. The cost in 1932 was £317 16s 2d and in 1931, £308 5s.

The usual articles of food supplied to patients are milk, oatmeal, eggs and butcher meat. Occasionally, in a case where the patient's digestion is poor, farinaceous food is given instead of oatmeal. During the winter months cod liver oil and malt are granted to numerous patients who, during the summer months, can manage without help.

Within reasonable limits no attempt is made to regulate the supply of additional nourishment on the basis of family or personal income. The granting of additional nourishment largely depends on the severity of the case and as most of the patients who receive food under the County Tuberculosis Scheme come under the pulmonary category and are constantly requiring good and regular food to maintain their strength, grants have often to be continued for long periods.

Lupus.—Ten patients suffering from Lupus or Tuberculosis of the Skin were granted travelling facilities to enable them to attend Edinburgh Royal Infirmary for treatment. The total cost was £104 8s 5d or £10 8s 10d per patient.

It is very satisfactory to note that one or two cases who have been attending the Infirmary for some years have shown a decided improvement with the result that during the better weather they have not required to attend so often.

Under the scheme of the County Tuberculosis Authority for the supply of drugs and dressings to Tuberculosis patients, 57 medical practitioners prescribed for 378 patients at a cost of £259 4s 3d. The average cost per patient was 13s 8½d and the average cost per doctor £4s 10s 11d. The cost of drugs in 1932 was £257 17s 8d ; in 1931, £275 14s 10d ; and in 1930, £291 14s 6d.

Report by Dr. Lundie, Executive Tuberculosis Officer, for 1933.

The past year has witnessed a diminution in the new notifications in the new cases verified and in the deaths of new cases, both of pulmonary and of non-pulmonary tuberculosis.

In the year under consideration, 414 new patients were examined—pulmonary 202, non-pulmonary 212. The pulmonary series included 149 notified before examination ; 4 notified after examination and 49 not notified at all. The non-pulmonary series included 206 notified and 6 not notified.

The number of homes visited was 2,443. This included 202 first visits to pulmonary patients; 212 first visits to non-pulmonary patients 892 revisits to pulmonary patients ; 1,033 revisits to non-pulmonary and 104 visits to examine contacts.

Out of the 202 new pulmonary patients, 102 were found to have tuberculosis of the lungs, 13 tuberculosis elsewhere, 64 were not tuberculous at all and 23 were still under observation at the end of the year

In 64 of the 102 cases accepted as pulmonary tuberculosis sputum examinations were made, 55 being found positive and 9 negative. Thirty-eight were not examined. Before the end of the year 31 of these patients had already died, 3 had left the district and 68 still remained on the register.

The number of cases not accepted as pulmonary tuberculosis was 100, of which 43 were dealt with at home, 21 were under observation in the Sanatorium, 13 were transferred to the non-pulmonary category and 23 still remained under observation at the end of the year.

In 19 of the 206 non-pulmonary notifications, the diagnosis was not confirmed. Six deaths occurred in the series and 10 of the patients left the district.

The new cases in this series are shown below.

Notified Cases (Non-Pulmonary).

Localisation of Disease.	No. of cases seen.	Admitted to Glenlomond.	Diagnosis not confirmed.
Glands	133	15	10
Abdomen	28	7	5
Spine	6	1	0
Hip	5	4	2
Other bones	18	5	2
Lupus	4	0	0
Other parts	12	0	0
Total	206	32	19

The incidence of pulmonary tuberculosis according to age and sex is shown in the next table. It is generally too high in both the 15-25 and the 25-35 age groups, particularly so in the case of females.

A reason recently adduced for the high incidence of pulmonary tuberculosis at this period is the popularity of sun bathing at this age but the incidence was already high before this practice became popular.

Age and Sex Incidence of 102 Cases of Pulmonary Tuberculosis.

0–5		5–10		10–15		15–25		25–35		35–45		45–65		65 up		Total.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0	1	1	3	5	3	14	21	9	20	6	6	6	3	0	4	41	61
1		4		8		35		29		12		9		4		102	

A comparison of these returns with those of the previous year shows the following differences :—Notifications—Pulmonary, 45 less ; Non-pulmonary, 22 less. Verified Cases—Pulmonary, 20 less ; Non-pulmonary, 16 less. Deaths of new cases—Pulmonary, 6 less ; Non-pulmonary, 14 less.

Every case is visited as soon as possible after notification and nearly every one has been seen within 7 days, most of them even earlier during the past year.

The contacts of every case are examined either at the first visit or more usually as soon thereafter as possible because they are not all able to be at home at one time.

Cases suitable for Sanatorium treatment are admitted at the earliest possible moment as well as some other cases where there is over-crowding or lack of nursing facilities. There is seldom any objection to Sanatorium treatment and there has never been a long list waiting for admission in the past year.

The circumstances of the family, the sanitation of the house, the milk supply and the family history are all enquired into at the first visit.

Too many cases still are seen for the first time in an advanced stage of the disease. Certain cases have been brought to light under examination as contacts and at least one case of fairly advanced disease was a contact who had a cough but never complained and appeared always to e well nourished and able to work.

In only three cases was Sanatorium treatment resolutely declined for no good reason. The patients adopted a fatalistic attitude and would take no advice.

The most difficult problem to be faced is that of the ambulant advanced case with infective sputum. No satisfactory solution has been devised to deal effectively with all cases. Each one is a separate problem and has to be dealt with on its own merits. Sometimes it has been found possible to send the children of the patient away to better surroundings either in a home or with relatives, but the patient has been known to weary for them and bring them back. Sometimes the patient is assisted to secure a better house. Co-operation with other branches of the Health Service is always sought when it is necessary, for instance, when insanitary conditions exist or the milk supply is suspected.

Difficult cases which require more extensive examination than can be made at home are sent to Glenlomond.

One great cause of delay in detecting an early case and commencing appropriate treatment is the insidious character of the disease and the remarkable mildness or lack of symptoms in its early stage. And complaints of listlessness or lassitude in members of an infected family

or among school children in healthy families should be carefully investigated. Area Medical Officers and District Nurses are helpful in bringing these cases to notice.

The rapid improvement of housing both in urban and rural areas is one of the most cheering sights to be observed from the point of view of prevention of tuberculosis. Some of the houses are well worth seeing and comparing with those just vacated.

There is evidence of increasing interest among parents in the prevention of tuberculosis and visits are always welcomed for the sake of the family even when the patient has no interest in himself or has a grievance. It is not always easy to rekindle lost interest unless suitable employment for the patient can be provided.

Children who have received the full benefit that the Sanatorium can afford, are from time to time discharged with a recommendation that they should receive tuberculin inunctions at home. In addition to this, it was deemed advisable to treat similarly at home mild cases of non-pulmonary tuberculosis which did not require Sanatorium treatment. This suggested the adoption of a modified procedure which has been favourably reported upon elsewhere, namely, similar treatment of contacts who reacted to inunction but had no clinical evidence of disease. Dr. Yule assented to the tentative exploration of this idea and a conversation with Dr. Munro gave further encouragement. It is too early yet to discuss results or to estimate what increase of work may arise. I have to thank the Area Medical Officers and Health Visitors for their assistance in supervising the inunction of children at clinics and I greatly appreciate all the other help received from them in other directions.

I also very much appreciate the privilege and honour of being sent as a delegate from the Fife County Council this year to the Annual Conference of the National Association for the Prevention of Tuberculosis in London. The addresses and discussions gave one much food for thought and stimulated further interest in the work.

TREATMENT OF VENEREAL DISEASES.

The administrative scheme of the Joint Committee applies throughout the Civil County with the exception of the Treatment Centre in the Burgh of Kirkcaldy, which is under the control of the Town Council on behalf of the Joint Committee.

The treatment centres are three in number, viz., The Public Health Dispensary, Market Street, Dunfermline ; The Dispensary, Dunnikier Road, Kirkcaldy ; and The Public Health Institute, 55 Constitution Road, Dundee.

The work under the Scheme continues as set forth in previous Annual Reports. Educational propaganda work was less in amount than that recorded for the previous year.

In the Annual Report for 1932, as in former Reports, the inadequat nature of the premises at Market Street, Dunfermline and their un suitability for the work undertaken therein from the point of view o patients and staff were stressed. Dr. Gumley, Medical Officer, in th subscribed report animadverts on the unsatisfactory features of th centre and lack of facilities for the proper and sufficient treatment o patients : he emphasies the fact that the location is unsuitable an militates against attendance and states that new and better premise are essential—an opinion substantiated in former reports. Whe the Dunfermline Centre was established after the War it was frankl recognised that the locus of the Centre was tentative and experimenta no better or more convenient site being available at the time and th volume of work to be done being problematical. The necessity of treatment centre at Dunfermline has been amply proved by the wor done and in lieu of the procrastination which has hitherto ruled, bon fide active consideration should be devoted to the question.

In the Report for 1932 I referred to the claim by the City of Edi burgh for payment of the treatment of patients from Fife attendin the Centre in the Royal Infirmary maintained by the Town Counci I understand that no decision has yet been arrived at but, as former recorded, it is difficult to find any justification for the alleged debt b the County.

During 1933, the cost of travelling facilities granted to necessito patients who, otherwise, would not have been able to attend for trea ment was £11 9s 11d as compared with £11 17s 6d in 1932 and £14 17s 1 in 1931.

Kirkcaldy Centre.—Dr. McIntosh, Medical Officer, records reduction in the number of new cases during the year although the was an increased number of patients attending from the County.

In all, 412 patients attended the Centre during 1933, of whom 2 were new cases (160 male, 60 female). Of the new cases 56 suffer from syphilis, 75 from gonorrhoea, 19 from non-specific venere infections and 70 from conditions other than venereal. The tot attendances at the Centre for the year was 4,202 and 2,102 doses arseno-benzol compounds were administered.

The aggregate in-patient days was 110 as compared with 167 in 19 and 404 in 1931.

The number of defaulters was 56. The number of patients discharg cured was 104.

The number of examinations of pathological material by the staff the Centre was 216 and by Professor Tulloch, University Colle Dundee, 665.

Dundee Centre.—There was a slight reduction in the new cases 43—male 34, female 9) attending the Public Health Institute, 55 onstitution Road, in contrast with 1932 (47 cases), and 1931 (51 cases).

Of the new cases, 8 were syphilis, 16 gonorrhoea, 10 other venereal nfections, 9 had no venereal infection.

The total attendances were 504 (male 309, female 195). The numbers f salvarsan and bismuth injections were 90 and 114 respectively. he aggregate of in-patient days was 315.

Dunfermline Centre.—The annual report by Dr. Graham Gumley n the work of Dunfermline Centre is subscribed :—

I have the honour to submit below a report of the clinical work carried ut at the Dunfermline Centre during the calendar year 1933.

New Cases.—During the year 174 persons had recourse to the clinic ; his number comprises 126 males and 48 females, a decrease on comarison with the preceding year of 24 males and 25 females.

While it is possible that this reduction in numbers may be an indicaion of lessened prevalence in the County, one regards it with some ubiety, and regards it as more probably due to two causes :—

(*a*) Continuing financial stringency in the area.
(*b*) Disinclination to come to the premises for treatment.

One is too well aware of the truth of (a). One suspects (*b*) to be lso accurate and in this connection useful information might be btained by a simple questionnaire sent to general practitioners in the rea.

Source of Cases.—The numbers recruited from the various areas are hown below in attached list. The route followed is shown immediately elow :—

Unrecommended	97
Recommended by general practitioners	48
Transferred from other Centres	7
Recommended by Parish Authorities	6
In-patients of Springfield Asylum	2
Recommended by Health Visitors	2
Recommended by M.O. of Dunfermline Burgh	4
Recommended by County Area Medical Officers ..	7
Recommended by Tuberculosis Officer	1

Incidence of Disease in New Patients.—In order to correspond with he figures shown in the annual return to the Department of Health, distinction is made between a patient and a case. For example, one atient may yield two cases of infection—syphilis *and* gonorrhoea or onorrhoea *and* chancroid. The percentages shown below are calculated n this basis :—

Gonorrhoea	40·0 per cent.
Syphilis	20·55 per cent.
Chancroid	·55 per cent.
Non-specific venereal infections	6·66 per cent.
Non-venereal conditions and persons found to be healthy	32·22 per cent.

The great majority of cases of gonorrhoea present themselves at an early stage and respond well to treatment. A few cases have developed complications—in a mining area where patients must remain at work complications are bound to occur : with continued attendance and treatment these all clear up and although some damage has been done it has been possible in all cases completely to eradicate the infection before discharging the patient. All cases of gonorrhoea are kept under observation for a minimum period of four months. Thereafter a test of cure is carried out before discharge.

Default.—We continue to have a considerable number of patients who fail to attend until discharged cured and, although many of these are no doubt free of infection, freedom of symptoms is not synonymous with cure, so that a certain number of these persons continue to provide a source of infection in the district. It is extremely difficult to gather defaulters back to the fold and the experience at Market Street during the year has shown that the response to letters—extremely tactful and guarded—has been for all practical purposes negligible. One believes that the knowledge that attendance could be compelled by law would largely do away with default. Unfortunately we have no such powers.

The cases of syphilis continue to appear in the latent and tertiary stages of the disease when treatment must be more prolonged—and costly—than in those cases which present themselves in the primary and secondary stages. More than half of the cases of syphilis found in an early stage also had gonorrhoea and came to seek assistance on account of the latter condition.

One is forced to conclude that there are cases of syphilis alone, in an early stage, which are concealed by the sufferer and do not come to treatment.

Further educational efforts will require to be made before this type of case can be brought to treatment.

Hospital Cases.—The number of cases admitted to hospital was 7 being exactly half the number admitted during the previous year. Of these, 5 were males and 2 females. The total number of days in hospital was 168, the average stay per case being thus 24 days. The corresponding figures for 1932 were 219 and 15·6 respectively.

Premises and Equipment.—The present premises at Market Street are not suitable for the most satisfactory work. The situation, in a cul-de-sac, is definitely bad. The street is a short straight one opening

from a busy main thoroughfare, overlooked by houses, and almost the only traffic entering it consists of patients coming to the clinic. Opposite the clinic building is a busy garage and buses are repaired almost at our door.

During the winter months one has watched on more than one occasion, some curious loiterer standing about the street, quite definitely watching patients entering the clinic. It requires something more than ordinary courage for a youth, or young girl, already apprehensive and fearful, to enter the premises in broad daylight.

It would be a great step forward if a more suitable site could be found —preferably within the grounds of a hospital. I think such a step would bring with it better attendance and a lower defaulter rate.

The premises proper are not all that is to be desired. They are cramped, cold, damp and ill lit. There is no electric light or hot water system. Lavatory accommodation is totally inadequate.

The interior of the building is gloomy and entirely lacks the " atmosphere " necessary to maintain satisfactory attendance. Should a patient faint there is no place for him to lie down for a few moments.

Our equipment is fairly adequate. There are several improvements and additions which might be made but one feels that new and better premises are essential in the first instance.

Painter work to premises and furniture is badly needed.

In concluding this section one appreciates that what is written has been written before. Nevertheless the need is great and emphasis is again laid on the desirability for reviewing the entire question of premises and equipment.

Springfield Asylum.—In regard to the treatment of patients in this institution the collaboration of Dr. Boyd and the medical officer of the centre has been continued as before. Cases are seen at the Asylum, treatment is decided upon and the necessary therapeutic agents are sent on. The administration of treatment is in the hands of the staff at the Asylum.

Tables.—Tables are submitted herewith. These show the numbers of patients from month to month, the amount of treatment given, the number of pathological specimens sent for examination, and the numbers of patients allocated to the various areas.

In submitting this report I wish to express my keen appreciation of the valuable assistance rendered by the Medical and Nursing Staff of the West Fife Infectious Diseases Hospital and to the Nurse and Medical Orderly at the Centre, my indebtedness for their constant co-operation throughout the year.

Statistics 1933.

	Persons reporting.		Syphilis.		Gonorrhoea.		Soft Sore.		Non-Specific V.D. Infections.		Conditions other than V.D.		Number of Clinical Cases.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January ..	16	7	3	1	9	4	..	..	2	..	2	2	23
February ..	10	4	2	0	4	3	1	..	..	..	3	1	14
March	5	6	1	4	2	..	..	..	..	..	2	2	11
April	10	2	1	0	3	1	..	..	1	..	5	1	12
May	10	1	3	1	4	..	..	..	2	..	2	..	12
June	6	6	1	2	2	..	..	..	..	..	3	4	12
July	9	1	1	0	2	..	..	..	2	..	4	1	10
August	3	5	0	1	1	1	..	..	2	..	..	3	8
September ..	13	0	2	0	7	..	..	..	..	..	4	..	13
October	16	8	5	2	5	4	..	..	1	..	5	4	26
November ..	16	2	3	1	10	1	..	..	..	..	4	..	19
December ..	12	6	2	1	6	3	..	..	2	..	4	2	20
Total ..	126	48	24	13	55	17	1	..	12	..	38	20	180

Districts from which Patients reported.

Aberdour	1	Glencraig	8
Aberdeen	1	Inverkeithing	7
Bowhill	3	Kelty	8
Burntisland	1	Kinglassie	1
Bradford	1	Limekilns	1
Blairhall	3	Lochgelly	7
Cardenden	5	Lochore	4
Cowdenbeath	15	London	1
Crosshill	4	Lumphinnans	1
Crossgates	2	Newmills	2
Cairneyhill	2	Rosyth	16
Cupar	4	Saline	2
Dunfermline	61	Torryburn	2
Dollar	1	High Valleyfield ..	3
Edinburgh	1	Low Valleyfield ..	2
Glasgow	1	Wellwood	3

MATERNITY SERVICE AND CHILD WELFARE.

The Scheme of the County Council operates throughout the Landward Area and twenty-three Small Burghs on the lines described in former Reports.

The duties undertaken by Dr. Krause, Deputy Medical Officer (Welfare), the Area Medical Officers, Dentists and Health Visitors comprise the care of mothers, infants and pre-school children, the medical and dental inspection and treatment of school children and a steadily increasing volume of dental work for the Public Assistance Department for necessitous adults in the Beath, Lochgelly and Wemyss Areas. Dr. Krause's report for 1933 is subscribed.

Applications for additional nourishment and admission to maternity homes, hospitals and orthopaedic institutions are dealt with by the County Medical Officer.

Dr. R. H. Dawson was appointed on a temporary basis on 1st September 1933 as Area Medical Officer, Kirkcaldy Area, in succession to Dr. D. Williams, who left the Service on 15th October 1932.

Towards the close of the year opinion on the urgent need for the provision of a new and suitably equipped building as welfare centre for the Burgh and District of Lochgelly crystallised and it may be that further action for the practical realisation of this project will be taken in the forthcoming year.

Similar provision to that proposed for Lochgelly is sorely needed for the Burgh of Buckhaven and the improvement of the accommodation at Tayport and Blairhall, although brought under consideration, appears to have been indefinitely postponed.

Reference was made last year to the proposed provision of new and enlarged Maternity Homes by the Burghs of Dunfermline and Kirkcaldy in place of their existing institutions which had been available to the County Council on a " user " basis for women from the Landward Area and Small Burghs since their establishment.

During the year there was again in respect of both institutions a larger call on the bed accommodation and in the case of Dunfermline a considerable number of proposed bookings were refused as beds were not available, an indication of the urgency of enlarged premises.

The proposed arrangement for the joint provision of a maternity hospital at Dunfermline by the Town and County Council continued during the year without apparent obvious advance at the end, the County Council refusing to consider partnership but seemingly being in favour of the " user " principle.

Plans were approved by Kirkcaldy Town Council for a new Maternity Hospital at Forth Park and, doubtless, when agreement has been reached by the County Council and Town Council in respect of the new maternity hospital at Dunfermline some similar principle will be applied in respect of the Kirkcaldy Institution.

Additional Nourishment.—During 1933 additional nourishment, principally in the form of milk and oatmeal, was issued to 84 expectant mothers, 140 nursing mothers, 222 children under five years of age and in 29 cases where mothers and children generally would benefit. 137 applications were refused. There was a decrease of 64 applications on the figure for 1932.

Occasionally cod liver oil, emulsion, etc., were authorised.

The cost of the food and milk, etc., supplied amounted to £347 9s 5½d as against £391 16s 3½d expended during 1932.

Kirkcaldy Maternity Home.—During 1933, 119 patients were admitted to the Home from the County area. Of the total, 110 were paying patients, 6 women were partly necessitous and one patient was wholly necessitous. In the case of two patients, the question of non-payment was referred to the County Clerk.

Davaar Maternity Home.—166 patients (inclusive of one baby) were admitted to the Home from the County area. 141 patients paid the usual fee, 14 were wholly necessitous, 7 partly necessitous while in 4 cases of non-payment the County Clerk was asked to recover the fees due.

The total number of patients admitted to Kirkcaldy and Davaar Maternity Homes was 285 as against 304 patients admitted to these Homes in 1932. A steady increase in the number of women admitted to the Maternity Homes has been maintained during the last ten years. The slight decrease in the figure for 1933 may in some measure be accounted for by the fact that by the end of November 1933 all the

beds in Davaar Maternity Home were reserved for the month of December and during the latter month patients who had not booked beds could not be admitted.

The amount contributed by patients towards their treatment and maintenance in the Homes was £752 11s 9d, while the County Council paid the sum of £866 16s 2d.

Midwives Acts.—Consequent upon altered procedure in connection with the payment of maternity benefit, increasing application is being made to this Department by necessitous mothers for the provision of midwifery service under the provisions of the Maternity Service and Child Welfare Scheme. Where maternity benefit will not be received and the financial circumstances of the household are such that the services of a midwife or doctor cannot be retained, this is furnished at public cost provided the need is proved prior to confinement taking place.

During 1933 fifty applications for the provision at public cost of midwifery service were received. Of these, 24 were granted at a cost of £27 17s 5d. The applications were refused in 26 cases : in eleven of these, it was found on inquiry that maternity benefit was payable and in a similar number the service had already been rendered. Two applications were received from medical practitioners for payment of midwifery service : one was granted, the other refused.

The number of claims received from medical practitioners under Section 22, Midwives (Scotland) Acts, 1915 and 1927, was 145 : five claims were subsequently withdrawn. The expenditure involved was £184 19s 6d.

Orthopaedic Treatment of Children.—During the year a scheme was initiated and established for the orthopaedic treatment of crippled children. Children suffering from remediable malformations and crippling as the result of illness are gathered in sufficient numbers at appropriate welfare centres throughout the County where they are examined by the Orthopaedic Surgeon who advises treatment, domiciliary or institutional as the case may be. Mr. Cochrane, Surgeon, Princess Margaret Rose Hospital, Fairmilehead, Edinburgh, is the visiting specialist. Where home treatment is deemed appropriate, the Area Medical Officer and Welfare Nurse endeavour to secure that this shall be given by the parents or relatives. Already it is becoming apparent that, if the full value of the scheme is to be realised, the appointment of a nurse trained in orthopaedic methods will be essential in the early future to treat and maintain supervision on children for whom institutional treatment is not necessary.

Eight patients were admitted to hospital during 1933, of whom 6 entered Fairmilehead Hospital and 2 Douglas House for Cripple Children, the cost being £219 5s 8d.

Infant Life Protection.—The number of children on the Register at 31st December 1933 was 67 : the notices received during the year numbered 24. The numbers of children removed from the Register were :—(1) Attainment of nine years, 5 ; (2) Returned to parents, 14 ; (3) Adopted by guardian, 1 ; (4) Removed from Area, 4.

Nursery Schools.—On 1st September 1930 a Joint Memorandum by the Scottish Education Department and the Department of Health for Scotland on " Children under School Age " was issued for the consideration of the County Council both as Education Authority and as Public Health Authority, and, at the same time, was sent to the Town Councils of Dunfermline and Kirkcaldy.

The Joint Memorandum drew attention to the power of the County Council to supply nursery schools under Section 8 (*a*) of the Education (Scotland) Act 1918, and the wide powers of a similar nature under statutes relating to Maternity and Child Welfare vested in the Council as the one Authority responsible for all schemes affecting the health, well-being and education of the child from its birth to the end of its school life.

In accord with instructions, I submitted in December 1930 a report on the subject-matter of the Memorandum : this was remitted to a Sub-Committee of the Public Health Committee which, I understand, owing to the financial stress of the time, postponed consideration of the question.

In July 1933 the Report of the Consultative Committee on Infant and Nursery Schools was published showing the value of adequate care during the early years of life in the prevention of permanent defects both of physical and of nervous and mental development.

As the provision of nursery schools is a question of steadily increasing importance, my report of 1930 is subscribed as an outline of the subject :—

Children under School Age.

"I have to submit the following observations on the " Joint Memorandum of the Scottish Education Department and the Department of Health for Scotland " on " Children under School Age " issued by Mr. Adamson, Secretary of State for Scotland, for the careful consideration of the County Council.

In the Memorandum, reference is made to the beneficial results accruing from the provision of medical inspection and treatment of school children and from the establishment of maternity service and child welfare schemes whereby the infantile mortality has been greatly reduced. Stress is laid, however, on the fact that hitherto practically nothing has been done for the pre-school child, that is, for the child after infancy and before entrance on school-life at the age of five years.

The Memorandum refers to this serious gap in the National Health Scheme as grossly wasteful from an economic point of view and urges that earnest and practical consideration be given to its closure.

As a brief index of the nature of the problem, the following figures from the last Annual Report of Fife Education Authority on the Medical Inspection of School Children during the year ending July 1929 are of interest. During that year the total number of "entrant infants" examined by the School Medical Staff was 4,356 (boys 2,219 ; girls 2,137), of whom 2,178 (boys 1,082 ; girls 1,096) were notified to parents as suffering from defects. Thus, 50 per cent., or exactly half of the total number of children entering on school life are found on examination by the School Medical Officers to be suffering from such defects as dental disease, enlarged tonsils and adenoids, middle ear disease, defective vision, inflammation of eyelids and eyes, skin diseases, rickets, verminous conditions, etc. These figures are seriously startling. So far as I remember and as information ready to hand goes, the analogous figure for England generally is approximately 25 to 35 per cent. It is apparent, therefore, that the physical condition of children entering school is much worse in Fife than in England.

The children entering on school life are, however, only the survivors of an age-period when the struggle for existence against faulty and defective nutrition, tuberculosis, rheumatism and infective diseases of every kind is at its hardest. Approximately 95 per cent. of all deaths from measles and whooping cough occur under five years of age and it is during this age-period that practically every infectious disease and condition exacts its heaviest toll on child life.

We know that there has been a steady fall in the infantile mortality during the last twenty years. The annual infantile mortality of the two populous western districts of Fife County has fallen from approximately 100 per 1,000 births (a higher figure was often recorded) to as low as 70 per 1,000 births within recent years. There is not the same happy record of lessened mortality for the ages between two and five years and the result of this heavy incidence of disease on the pre-school child, together with poverty, parental ignorance and neglect, is the aftermath of sickness, decreptitude and defect which is discovered immediately the child enters school. The School Medical Service and Clinic does much to alleviate and remedy such defects but school medical treatment is in great measure a treatment of symptoms after the damage has been done—a locking of the stable door after the horse has bolted—an expensive and, in part, uneconomic business.

We are dealing increasingly effectively with the problems of maternity and infancy and for a good many years have steadily expanded the scheme for securing the health of the school child.

It is all the more difficult, therefore, to realise why the years between infancy and school age, the most profitable period for preventive public

health measures, have hitherto been disregarded and neglected. We appear to begin at the wrong age-period with school medical work with the result that we are treating defects in school children instead of preventing them at an earlier age. I commented on this subject when the administrative measures consequent upon the Local Government Act, 1929, were under discussion. It appealed to me as likely to prove a costly mistake if the divorce between the school and the pre-school service continued longer. The services are now united.

There is another aspect of pre-school age deserving of mention. Such outstanding educationists of the past as Froebel and Montessori regarded the first five years of life as fraught with unrealised educational possibilities but their foresight was not appreciated until the practical experience of the nursery school illustrated its value. It is now recognised that the earliest are the most impressionable years, those when the child develops more rapidly than at any other time during life, the years when habits are formed and when competent skilled supervision is essential to ensure that the habits are right.

Sufficient has, I think, been said to justify the institution of substantial practical measures for the safeguarding of the health and environment of the pre-school child, and, so far as my observation has gone, this would be most effectively and economically done by the establishment of nursery schools if the County Council regard the circumstances of the times as ripe and appropriate for such an advance in view of the proposed extension of school age and what may be involved thereby.

Of the two measures, I imagine that the provision of efficient nursery schools would educe more for the health and happiness of the nation than the extension of school-age—despite the fact that the former is only recommended by the Central Department, whereas the latter is likely to have the force of law in the immediate future.

It will be urged against the nursery school doubtless that the best place for the pre-school child is with its mother. This is not the truth of the great majority of mothers, whether their circumstances be affluent or the reverse, and more particularly so where the conditions of the home are such as to handicap and retard the physical and mental development of the child before it reaches school age, with the result that it cannot profit effectively from the education furnished later in life at heavy cost to the community. I have already referred to the part played by infective diseases in the pre-school period : pre-disposing factors in the prevalence of these diseases are faults of feeding and nurture resulting from inexperience, ignorance, poverty and neglect in the home.

What a nursery school is may be illustrated best by a brief description. Experience, so far as it has gone, appears to indicate that nursery school training and education be limited to the years between two and

five. The main features of nursery school education are :—Healthy physical and mental development by ensuring freedom of movement in ample space under open-air conditions in a friendly atmosphere, the furnishings and equipment of the school being appropriate to the needs of children. There is nothing of the nature of the discipline or systematic teaching that holds in the ordinary day school. Proper habits are inculcated, the child being educated in the routine use of things at the right time, allowance being made for personal idiosyncrasy. Provision is made for a period of sleep during the day. A meal or meals of proper food value and varied constituents is provided at the cost mainly of the parents. The premises are appropriately fitted for the bathing of children. The training of the child in such routine personal hygiene as the use of the lavatory, washing hands and face, the use of comb, brush and toothbrush, how to dress himself, and how to behave at meals tends to the growth of his mental faculties, social attainments and moral outlook. The atmosphere of the nursery school under competent trained supervision (not the training of the ordinary teacher) ensures, by its communal activities and play, habits of self-control and discipline, good temper and mutual forbearance. The training provided develops the powers of observation, the intelligence and the individuality of the child by the special opportunities it affords and encourages.

Thus the nursery school ensures not only the healthy development of the normal child but the rapid cure of the weakly one.

Site and Buildings.—Obviously, the site should be well drained, dry and of southerly aspect. The building should be of a light composite character, something of the nature of a shelter which I can illustrate best by the example of the children's hut at Glenlomond Sanatorium. It should be of the one-storey open-air type but capable of excluding the severe winter conditions of our climate while admitting the maximum of light. It should be situated in ground suitable as a playground but having as its main characteristic a garden with grass plot or lawn. The location of the nursery school should be as close to the homes of the children as possible as thereby the co-operation and education of the parents in child-training are secured. If the nursery school is near an elementary school, so much the better.

Cost of Buildings.—Buildings even of the shelter type may be made to cost anything. The cost should not exceed, I think, £20-25 per child-place inclusive of sanitary fitments and heating plant but excluding furnishings and equipment. The individual compartments or shelters of the building should be of a size to accommodate not more than 36-40 children. The maintenance cost per head per annum of a child in a nursery school varies with the numbers dealt with but should not exceed £14 : in certain schools the cost is under £12 per annum.

These figures are not likely to be reached with a nursery-school population of less than one hundred children.

STAFF.—The nursery school must have a specially trained and fully qualified teacher (the special training is essential) and three uncertificated assistants (with, say, normal school training) per 100 children. Young girls may, with educational advantage to themselves, be employed as helpers.

The County Council as Child Welfare Authority have power to provide any practical scheme for the health and welfare of children under five years, and have also powers as Education Authority to establish or contribute to the establishment of nursery schools in terms of Section 8, Education Act 1918, for all children over two years. The grants available should be investigated and specific information obtained on the subject. The grants obtainable in England in respect of nursery schools are, I understand, on a different basis from those available in Scotland.

I submit the above statement as a brief resumé of the question.

The nursery school has amply justified and proved itself in the slum areas of large towns but faults of nurture (using the word in its widest sense) are not limited to such areas. The training and education of the nursery school might be extended, I imagine, with advantage to every class of the population.

If the Council approve the principle of the nursery school, I shall be pleased to give my view of the centre or centres where such schools might most appropriately be established."

Report by Dr. R. A. Krause, Deputy Medical Officer (Welfare).

In the Report for 1932 it was pointed out that the work of the Medical Officer in Burntisland and Markinch districts was practically in abeyance owing to the vacancy in these districts being left unfilled. In September 1933 Dr. Dawson took up duties as a temporary Area Medical Officer and his first duty was to make up some of the more urgent arrears. The resignation of Dr. J. L. Chisholm caused a vacancy in Wemyss Area and this was filled by transferring Dr. J. Thomson from Lochgelly Area. The latter vacancy was filled by the appointment of Dr. J. Comrie as Area Medical Officer. These various changes are hampering the development of our Maternity and Child Welfare Scheme.

The work of the Health Visitors is reported upon under the following headings :—

(1) Infant—births and deaths.
(2) Conditions of homes on first visits.
(3) Breast feeding, etc.

(4) Pre-school children.
(5) Visitation figures.
(6) Infant Protection.

(1) Infant Births and Deaths.

The number of births reported during the year 1933 was 1,902 boys, ,683 girls and one child—sex non-determinable. The figure 3,586 is a lecrease of 155 births on the 1932 figure (62 boys and 93 girls). These irths were distributed through the various districts as follows :—

Dunfermline	525
Cowdenbeath and Lochgelly	1192
Kirkcaldy	359
Wemyss	722
Cupar	344
St. Andrews	266
Anstruther	178
	3586

The number of still-births was 126—a decrease of 33—(Dunfermline 9, Cowdenbeath and Lochgelly 47, Kirkcaldy 12, Wemyss 20 and North-East Fife 28). Prematurity, difficult and abnormal labour and oor health of mothers are given as the most frequent causes. Other auses were mothers suffering from shock, placenta praevia, macerated oetuses, hydrocephalic and anencephalic foetuses and accidental uffocation (two cases).

The number of premature births was 170 or an increase of 17 over ast year. Albuminuria and poor health of mother are frequently iven as causes. In Glencraig, out of 22 premature babies, 11 died. The number of illegitimate births was 185 (Dunfermline 45, Cowdenbeath and Lochgelly 65, Kirkcaldy 17, Wemyss 27, and North-East Fife 45). The figure last year was 183. The number of plural births was 40 (55 in 1932).

A slight decrease in the number of cases not notified in accordance with the provisions laid down by the Notification of Births Act, 1907, as to be recorded. The distribution of the non-notified cases was as ollows :—Dunfermline 10, Cowdenbeath and Lochgelly 13, Kirkcaldy , Wemyss 13, and North-East Fife 18. This gives a total of 57 as gainst 58 last year and 101 in year 1931.

The number of births attended by a doctor was 2,507 and by mid-wives 1,039. Twenty-three births were unattended by doctor or midwife. Information was received regarding seventeen births that ook place in institutions.

The number of infant deaths was reported as 229 (254 last year)— Dunfermline 34, Cowdenbeath and Lochgelly 87, Kirkcaldy 21, Wemyss 1 and North-East Fife 36). In 120 cases the cause of death was pre-maturity or debility (48 in Cowdenbeath and Lochgelly), 56 were due

to respiratory diseases, 9 to infectious diseases, 2 to diarrhoeal diseases, 8 to other diseases of the digestive system and 34 to other diseases. One of the nurses reports on a mother who suffers a great deal from asthma. She has had " her fourth premature birth, none of which lived long." Neither institutional nor home treatment made any difference. The last infant lived only three hours. Another nurse reports the death of an infant from convulsions. Here the mother persisted despite repeated advice against over-feeding of the infant. Deaths due to intususception and strangulated hernia are also included. One abandoned infant was found dead on the foreshore at West Wemyss.

(2) Conditions of Homes on First Visits.

The condition of the majority of the homes at the first visit by the Health Visitors are found to be satisfactory. The number of cases reported as " indifferent " was :—

Dunfermline	31
Cowdenbeath and Lochgelly	53
Kirkcaldy	14
Wemyss	83
North-East Fife	59
	240

In 30 cases the condition of the homes was " dirty " (Wemyss 21). In the West of Fife there were no cases of extreme overcrowding. There is, however, overcrowding in Oakley and Gowkhall and Hill of Beath. In the latter place there is a case of three families staying in one house. Two rooms are sub-let, the number in each room being 5 and 6 respectively. The tenant and his family—seven—occupy the kitchen. In Kelty the housing conditions are greatly improved but at the first visits nurse found 37 families in " sub-lets." A case of overcrowding was reported in Cowdenbeath. Here a family of six occupied a small and dark room. As the man was unemployed, it was found impossible to do anything for this family. In the Burgh of Lochgelly the nurse reports that " quite a large number of young married people are living in sub-let rooms and are dependent for water and lavatory use on the poeple who live in the kitchen. The result is, no convenience after the kitchen door is locked at night or until opened in the morning. There are 19 or 20 people with children in situations like the above. In Glencraig District it is reported that at the " initial visits 80 families were living in one room—18 or 20 of these had 6 to 8 in the family. In two-roomed houses 15 families with from 9 to 12 inmates and in three-roomed houses 12 families at least with 10 to 16 inmates—this out of a total of 240 births." In Auchterderran the nurse reports that there were 13 unsatisfactory homes. In the case of six of these the inspector of the R.S.S.P.C.C. had to be informed. In Thornton it

stimated that at least half of the " new houses " have two families ving in each house. " This condition is due to the big influx of ailway workers." Whilst new houses have been built for slum clear- nce there are still " about a dozen couples living in sub-let rooms." n Denbeath, although the houses are good there is considerable vercrowding. In the three-roomed houses there are sometimes hree families housed." In one case there were three families con- isting of 6 adults and 9 children. Whilst the sanitary arrangements ıay be considered adequate, the larder accommodation is certainly eficient even where there are only two families occupying these houses. n lower Methil there are many poor houses and because of sub-letting ooms there is an appreciable amount of overcrowding. In these areas here are quite a number of people still living in condemned houses. 'hey have not the means to pay the rents of new houses. If they are ıade to remove to a new house, the family usually suffer as there is ess money available for nourishing food. The resulting bad health equires medical attention and further expense. " Lower rented ouses for these people are urgently needed."

In the North-East of Fife there are some cases of overcrowding here nd there but not many. In the landward area " a number of cottar ouses have been reconditioned but a great number are still in a bad tate, damp walls, one small window, no washing house, and dry losets dilapidated."

(3) Breast Feeding, etc.

At their " First " visit the Health Visitors find that 80·3 per cent. of he mothers breast feed their babies. For the different districts the gures were :—Dunfermline 404 (79 bottle, 12 mixed), Cowdenbeath nd Lochgelly 990 (113 bottle, 24 mixed), Kirkcaldy 271 (54 bottle, 7 mixed), Wemyss 587 (98 bottle, 13 mixed), North-East Fife 628 104 bottle, 22 mixed).

In the West of Fife 50 per cent. of the infants are breast fed up to ; or 9 months, 20 per cent. are weaned between 3-6 months and the est are weaned before that time. Those given artificial feeding are ıainly on diluted milk. Only a few are on a proprietary preparation. t is, as a result of the Health Visitors' work becoming more generally ecognised by the mothers that the correct food for the young infant s its mother's milk. The great importance of early domiciliary visita- ion by the Health Visitors is thus emphasised.

In Cowdenbeath the " vast majority of the infants are breast fed ıut by the end of three months a large number are weaned for various easons." Unfortunately the doctors tend to advise weaning when a light re-adjustment of the mother's diet or regularity in feeding the ıfant would overcome the difficulty. " Generally, on inquiry, one inds that the baby is being over-fed." The regularity of feeding has

to be emphasised over and over again, and mothers have to be told that an infant is not hungry every time it cries. The usual tendency is to give a child a " feed " whenever it cries. The immediate effect is to stop the infant's crying but it lays the foundation of a host of gastric and other troubles later.

In Lochgelly there is a growing tendency to give artificial feeding. " After the second week or so there is no doubt a great many mothers seem to be unable to nourish their babies on the breast." A few of the breast fed babies do not thrive but probably would do so if they were fed on cow's milk. In some of these cases the mothers maintain they cannot afford to bottle feed the baby. In Glencraig many mothers seem to think that breast feeding is not sufficient for the baby and this diet has to be supplemented by cow's milk or by solids. An increasing number of the mothers, however, are beginning to recognise the value of regular breast feeding. In Auchterderran the supplementary feeding is usually started at six months. In this district, however, infants are given biscuits in water at quite an early age.

In Burntisland it is found that most of the mothers who cannot breast feed " have a very low wage coming into the house, or the husband is on the dole."

In Buckhaven, whilst a high percentage of the babies are breast fed to begin with, there seems to be " a greater tendency during the past year for mothers to take the child off the breast sooner than the first three months. This is very often on doctor's advice." In Methil 50 per cent. of the infants are breast fed up to 8 or 10 months. " A very large percentage of the remainder for one reason or another, give up breast feeding during the second or third month, frequently through lack of faith in the adequacy of their own milk supply."

In the fishing villages breast feeding is usually replaced by artificial feeding at the end of the first month. The mothers are, however, advised as to the importance of regular feeding. The co-operation of the younger district nurses, who are all keen on breast feeding, is being found to be most helpful to the health visitor in this aspect of her work.

In the outlying agricultural districts of Cupar the mothers generally breast feed to the 9th or 10th month. In the Burghs, particularly Newburgh and Auchtermuchty, most babies are bottle fed. This applies to the younger mothers who, in the towns, find breast feeding interferes with their pleasure.

(4) Pre-School Children.

The need for the establishment of nursery schools or classes for the young pre-school child in industrial areas is confirmed and emphasised when one reads the following :—" In the homes where there is a family and infant, very little attention is paid to the toddler. The child has

) regular time for meals and no regular time for his bath and bed. he child is given practically anything to eat, is put to bed at all hours the night and gets up any time in the morning. Very few toddlers ave milk, vegetables or fruit included in their diet. Also, in quite a umber of homes, very few of the pre-school children are encouraged) regular habits." The toddler consumes only a small amount of ilk although it is he who requires a wholesome supply of milk daily, the tissues of the body are to have their proper chance to develop ong physiological lines. Unfortunately, in a large number of the ses the toddler is given a tea dinner or bread and a " fry "—such as usages, kippers, etc. Even the " staff of life " is of the white de-talised variety with the result that the child is given a diet which ay be sufficient in amount but entirely lacking in those important e essential substances, such as mineral matters and vitamins found milk, butter, fresh vegetables, or fruits as well as whole-meal bread. he following example of the dinner taken by a family of eight was ported by one of the nurses who happened to visit as the family were tting down to dinner. There were 16 penny pies, a large plate of nny cakes, white bread and tea. This is not an isolated case but curs far more frequently than one would imagine. It is not that is kind of feeding is cheap—in fact a wholesome meal could be pplied at the same or less cost—but it is ignorance on the part of the other. There are, however, a number of cases—families living in sub-lets "—where it is practically impossible for a proper meal to be epared. These cases can only be met by improving the housing nditions.

There are a number of places where a nursery school would be a great set both from a health as well as from a social and educational point of ew, but there is one which, in my opinion, stands out prominently for rly consideration. This is lower Methil. Here there are many poor uses, and also overcrowding from sub-letting. The lack of open spaces r recreation purposes, the relatively narrow streets as well as the condition the homes urgently call for something being done for the pre-school ildren.

In the East of Fife towns and fishing villages, the young children are ell cared for, although there is a tendency to give over much cereal the diet. The toddler in the ploughman's cottage " is less well urished and more apt to be rickety than the town equivalent, a ndition due no doubt to the very poor rate of pay in the country stricts at present."

(5) Visitation Figures.

In the year 1933 the Health Visitors paid 53,239 home or domiciliary sits. The figures for the various districts were Dunfermline 9,367, owdenbeath and Lochgelly 14,481, Kirkcaldy 6,851, Wemyss 8,895,

and North-East Fife 13,645. At these visits 60,700 mothers, infants and pre-school children were seen. Advice was given to 3,963 expectant mothers ; further, 33,577 nursing mothers and infants were seen as well as 23,160 pre-school children. As inspectors of midwives, the nurses paid 145 visits to midwives in their areas. Under the Tuberculosis Scheme, arrangements were made for the Health Visitor to act as the Tuberculosis Nurse. For this purpose the nurses made 7,901 visits (3,308 for pulmonary and 4,593 for non-pulmonary cases). Under these Schemes the Health Visitors have thus made a total of 61,286 home visits—an increase of over 2,000 visits on last year.

(6) Infant Protection.

No. of Infants on Register January 1933	69
Added during 1933	27
Removed from the district	8
Returned to relatives	19
No. now over 9 years of age	3

The Health Visitors who act as the Infant Protection Visitors, visited all the new cases and 26 preliminary reports were received. In 17 of the cases it was reported that there were no fireguards. In all such cases the attention of the guardian is drawn to Section 15 of Part I of the Children Act, 1908. According to this section " If any person over the age of sixteen years who has the custody, charge or care of any child under the age of seven years allows that child to be in any room containing an open fire grate not sufficiently protected to guard against the risk of the child being burnt or scalded, without taking reasonable precautions against that risk, and by reason thereof the child is killed or suffers serious injury, he shall on summary conviction be liable to a fine not exceeding ten pounds."

In Dunfermline District one guardian was found unsatisfactory and the infant was removed, also one child was removed to the care of an aunt, as the guardian was found to be not of good moral character.

In Cupar District the home conditions as reported on, in the preliminary report, were queried by the Visitor but subsequent report showed that the child was well cared for.

Every child on the Infant Protection Register is visited quarterly by the Health Visitors. In Dunfermline District a case was reported as suffering from impetigo of the scalp and of otorrhoea. The Area Medical Officer was asked to see the case. In Kirkcaldy District two cases were reported as not too satisfactory. They are both being kept under strict supervision. In another case the home life of the guardian seemed unsatisfactory and the child was found to be in poor health. This infant was removed by the mother and is now outwith Fife County. In St. Andrews district one home was reported to be very poor. The Area Medical Officer's attention was drawn to this case and there has been satisfactory improvement.

Besides the 26 home visits made for the preliminary reports, there were also 237 visits made for the quarterly reports.

Other aspects of welfare work included in this Report are :—

(*a*) Midwives Acts, 1915 and 1927.
(*b*) Maternity and Child Welfare Centres.
(*c*) Ultra-Violet Rays therapy.
(*d*) Dental treatment.
(*e*) Eye refractions.
(*f*) Mental Defectives—Institution cases.

(a) Midwives Acts, 1915 and 1927.

In 1933 the number of midwives practising in the County of Fife was :—Dunfermline District 16, Cowdenbeath and Lochgelly District 15, Kirkcaldy District 5, Wemyss District 4, Cupar District 5, St. Andrews District 9, Anstruther District 1.

Medical practitioners were sent for in 198 cases of emergencies as against 214 in 1932. Of these, 59 were in Dunfermline District, 121 in Cowdenbeath and Lochgelly District, and 18 in three of the other Districts. An analysis of the cases for which medical assistance was sent is shown in the following figures :—

Delayed labour and uterine inertia	47
Torn perineum	30
Abnormal labour	20
Stillbirths	17
Inflamed and discharging eyes	17
Premature births	16
Raised temperature	12
Jaundice	6
Weakness—	
(*a*) Mother	1
(*b*) Baby	5
Maternal haemorrhage—	
(*a*) Ante-partum	2
(*b*) Post-partum	3
Pain and puffiness of legs, etc.	3
Adherent and retained placenta	3
Deformities and malformation	2
Placenta praevia	1
Abortion	1
Death of baby	2
Shock and collapse	2
Bad breast	2
Miscellaneous (swelling on child's head, swelling on neck, melaena neonatorum, sickness, etc.)	6
	198

Besides the number of applications received for medical assistance, the following number of other forms received by the Public Health Department from midwives are :—

Death (before doctor's arrival)	2
Stillbirths	24
Laying out of dead body	22
Liability to be a source of infection	11
Artificial feeding	5

Midwives attended at 1,040 confinements out of a total of 3,586 births. There were 21 confinements at which neither a doctor nor a midwife attended. Of a total number of 80 infants' deaths (within 10 days of birth), 17 occurred in the practice of midwives. The following are the figures for the number of conditions occurring in the practice of midwives—the figures in brackets are the total for the County :—

Opththalmia Neonatorum	21 (102)
Puerperal Fever	4 (19)
Puerperal Pyrexia	2 (19)
Stillbirths	24 (121)

Of the cases of puerperal fever three died (one in the practice of a midwife) and of the puerperal pyrexia two died (one in the practice of a midwife).

The number of visits of inspection of midwives carried out by the Health Visitors was 140.

The following complaints against midwives were inquired into :— (1) temperature charts were not available when the Health Visitor called and the midwife was communicated with ; (2) a midwife was warned that she had not reported as laid down in the " Regulations " that when attending a mother she told her " that as she had to go to work the baby could be put on the bottle " ; (3) a medical practitioner, at the beginning and again later on in the year, made complaints against a midwife regarding her conduct and methods of practice as a midwife. The case is being considered by the Central Midwives Board.

In the Lochgelly District a handywoman had to be warned because of a number of confinements she attended without calling in a medical practitioner. The explanation given was that it was a " precipitate labour " which occurred in each of the cases. The frequency of this explanation aroused suspicion but it is difficult to get the patients to give evidence which will help to bring forward a charge of illegal practice under the Midwives Acts. This handywoman is, however, being kept under close observation.

Similarly, in Wemyss and Inverkeithing districts, inquiries were made regarding handywomen and the Health Visitors were advised to keep them under observation. In Kelty a non-registered midwife attended a confinement in an emergency but omitted to notify the birth. She was communicated with accordingly.

(b) Maternity and Child Welfare Centres.

The very unsatisfactory conditions prevailing in Lochgelly Welfare Clinic have been again considered by the Public Health Committee

and they decided that an up-to-date clinic was urgently necessary in this district to meet the local requirements and to allow for a certain amount of centralisation of specialist work for the Lochgelly Glencraig-Auchterderran districts.

In last year's report the inadequacy of the Child Welfare Clinic at Denbeath was indicated. The position is complicated here by the fact that there is a satisfactory school clinic at Buckhaven and this makes the centralisation of all the clinic work at Denbeath difficult. It may be necessary to consider a less extensive scheme in order to allow the setting up of a proper and modern Child Welfare Clinic somewhere near the present one.

The clinic accommodation at Crosshill has been extended by the temporary addition of a consulting and waiting room. The latter allows the mothers to wait in some comfort without encroaching on the school. By the insertion of a light wall it has also been possible to make a small room available for the treatment of minor ailments. This allows of the dentist and the school nurse treating cases simultaneously, if necessary, and without disturbing each other.

Last year it was indicated that clinic accommodation was required at Anstruther. This was effected by reconstructing the old technical school. The accommodation thus provided consists of a fair-sized waiting room, a doctor's consulting room, a general clinic, and a dental clinic. The doctor's room will be available for the examination of children or adults, and when required can be darkened and used as an eye examination (refraction) room. The general clinic is of fair size and consequently will also be able to be used as a baby weighing clinic. The dental clinic is also a good-sized room, and when properly furnished will be a great asset to the dental scheme in this area.

Increased accommodation has also been made available at Burntisland and Kelty. At Tayport, however, better clinic facilities are urgently called for. There are a considerable number of poor mothers here who would gladly avail themselves of a clinic if one were established.

At Cupar the opening of the new Bell-Baxter School has made it possible for the medical staff to obtain the full use of the clinic. Child Welfare Clinics have been started and the mothers " seem anxious to take advantage of the clinic and the attendance so far has been quite promising."

Maternity and Child Welfare Clinics.
New Cases and Total Attendances, 1933.

Clinic.	Expect't Mothers.	Infants under 12 mths.	Children 1-5 yrs.	Other Cases.	Total Attend'es.
Dunfermline District					
Crossgates ..	11	355	100	8	474
Inverkeithing	1	47	11	1	82
Torryburn ..	8	87	48	4	174
Cowdenbeath and Lochgelly District					
Auchterderran	5	183	67	27	283
Cowdenbeath	19	968	293	37	1,317
Crosshill ..	13	309	100	40	533
Kelty ..	24	458	70	91	663
Lochgelly ..	6	750	193	17	1,115
Kirkcaldy District					
Burntisland ..	..	43	26	17	410
Kinghorn ..	1	51	39	..	817
Thornton ..	1	189	44	..	310
Wemyss District					
Denbeath (K) ..	..	425	46	8	775
Do. (S) ..	..	409	69	3	753
Leven ..	4	96	58	6	901
North-East Fife					
Newburgh ..	..	118	159	54	331
St. Andrews ..	15	182	290	137	2,141
Tayport ..	7	112	141	19	273
Totals ..	115	4,792	1,754	469	11,352

There has been a slight decrease in the total attendances (11,352) at the Child Welfare Clinics but the number of new cases (1,779) has increased. The number of old cases attending was 5,341. Whilst mothers came with their babies for advice regarding a great variety of conditions, the bulk of the cases (808 new and 4,197 old) were brought for advice regarding feeding. A large number of these cases (730 new and 1,555 old) were referred to the clinic doctor but in 57 cases the mother was advised to see the family doctor. Some of the cases, such as with discharging ears, conjunctivitis and impetigo were sent to the general clinic for treatment. Others were referred to the dentist, to the eye specialist, or to the orthopaedic surgeon. At Auchterderran Clinic four infants and one pre-school child were supervised before and after operation for inguinal hernia. The results were satisfactory in all of the cases.

The Health Visitor for St. Andrews reports that the cases are almost entirely dietetic. " In dealing with the more serious of these, the Child Welfare Centre Nursery has proved itself invaluable both for breast and artificially fed babies. Extreme cases of marasmus are

very few now." In the landward area expectant mothers are visited "but in St. Andrews there is a clinic for midwives cases which is attended by the midwife of the St. Andrews Nursing Association."

These Child Welfare Clinics play an important part in our scheme but it must be pointed out that they are not to replace or displace domiciliary visits by the Health Visitors. Their function is to make it possible for the nurse to see her cases more frequently for weighing and advice. She can also refer any case to the clinic doctor for special advice or dietetics, or some defective condition of the infant or child.

Clinics also very often produce a friendly rivalry between mothers in the case of the infants and invariably the outward appearance and clothing of the child improves as the result of continued visits to the clinic. Unfortunately some of the more careless mothers will not come to the clinic because they are afraid of the possible criticism of others. Incidentally, one of the nurses points out that the going to the clinic compels some of the mothers to go out just for the walk—"otherwise some of them would hardly ever be away from their door."

The number of expectant mothers who come to the clinics for extra nourishment is not given in the table. The figure given only applies to those who came for advice, mainly regarding their health—especially their diet, clothing and arrangements for their impending confinement. In quite a number of cases urines were also examined for the possible presence of albumin or sugar. A large number of expectant mothers did not come to the clinic but were seen by the Health Visitors at their homes. In all cases the women were advised to make early arrangements for their confinement with a doctor or a midwife.

(c) Ultra-Violet Ray Therapy.

There are three centres at which ultra-violet ray therapy is applied. The number of cases and attendances made in the three clinics is as follows :—

Cowdenbeath	..	34 cases ;	849 attendances.
Lochgelly	..	33 ,,	649 ,,
Leven ..	..	53 ,,	1069 ,,

These figures show a further drop as compared to the two preceding years.

General debility and rickets constituted the bulk of the cases. Other conditions treated were tubercular glands (cervical and abdominal), lupus, dermatitis, eczema, dactylitis, chilblains and other miscellaneous cases. Whilst there was marked improvement in 12 cases and some improvement in most of the others, more benefit could be obtained if the parents would bring the children regularly. At the clinics an increasing number of the new cases are pre-school children, "but the attendance of these is very irregular." It seems the mothers do not seem to be willing to give the necessary time to bring the children.

These cases are not officially discharged and cannot be looked upon as "improved" or "otherwise" although they have benefited to a considerable extent.

Of the children treated, 7 were infants, 61 pre-school and 47 school children. Other cases (5) treated were adults, two of these were nursing mothers.

Dr. Thomson in his report points out the difficulty there is of "getting people to attend at the U.V.R. Clinic." This difficulty is common to all the clinics. He points out a possible explanation in that with the improvements taking place in housing conditions, the people do not feel the same need for U.V.R. treatment.

(d) Dental Treatment.

In Fife arrangements are made whereby pre-school children are treated at the school dental clinics. Expectant and nursing mothers found to be suffering in their health because of defective teeth are also treated after school hours if in necessitous or semi-necessitous circumstances. Further, Public Assistance cases and Policemen requiring dental treatment are referred to the County dental staff and if found requiring dental treatment are treated at school clinics after school hours.

(*a*) Pre-School Children.—The number of pre-school children treated during 1933 was 263 (Cowdenbeath 84, Lochgelly 85, Buckhaven 64, and North-East Fife 30)—an increase of 147 over last year. Whilst the majority of the cases come forward as "casuals" it is gratifying to note that over 50 young children were treated as appointment cases. It is evident that the dental hygiene propaganda, limited in amount as it is, is beginning to have its effect—slowly but nevertheless surely. If only the parents could be made to realise the value of bringing their children early, and periodically, for dental inspection, any treatment requiring to be given on the first appearance of any dental decay would be small in amount and painless. A visit to the dentist under such conditions would be a pleasant one and not the unpleasant experience which it is for a large number of children at present.

The number of teeth extracted in the case of pre-school children was 353 under a general anaesthetic and 437 under a local anaesthetic. Conservative treatment such as fillings, dressings, etc., numbered 32.

(*b*) Nursing and Expectant Mothers.—The number of cases treated under this heading was 64 (Cowdenbeath 28, Lochgelly 6, Buckhaven 16, and North-East Fife 4). The bulk of the treatment was extractions—65 under a local anaesthetic and 162 under general anaesthesia. There were 18 fillings and dressings inserted.

(*c*) County Police.—Thirteen (Cowdenbeath 1, Lochgelly 7, Buckhaven 3, North-East Fife 2) constables and sergeants were treated

by the whole-time staff. At least 24 attendances were made at the clinics where 37 teeth were extracted, 8 filled or dressed and impressions taken, also two upper and two lower dentures tried in and inserted.

(*d*) Public Assistance Cases.—The number of cases referred to the County dental staff was 85 (Cowdenbeath 42, Lochgelly 35, Buckhaven 7 and North-East Fife 1) and 181 attendances were made for dental treatment. The number of extractions was 523 (under local anaesthesia 100, under general anaesthesia 423) and 18 teeth had a "dressing" or a "filling" inserted. As a result of the removal of teeth, which was absolutely necessary in all these cases, applications were also made for the supply of dentures. Subsequently twenty upper and sixteen lower dentures were made and inserted. Also, three dentures had to be repaired or "remade."

Apart from the actual dental treatment of these different kinds of cases, a considerable amount of clerical work was involved, particularly where patients did not keep their appointments nor send word to the dentist explaining the reason for non-attendance. Unfortunately, dental treatment had to be refused to some of the cases where the patient would not take the advice of the dentist, indicating that they wished different treatment.

In about six cases it was necessary for radiographs to be taken in order that the dentist could have fuller information regarding the condition of the parts below the gums.

(e) Eye Refractions.

Public Assistance cases, as well as pre-school children, necessitous nursing and expectant mothers, have their eyes examined at the school clinics, and if necessary, are referred to one of the County Eye Specialists. The Public Assistance Committee referred 29 cases for eye examination. There were also 11 prescriptions for glasses referred to the Medical Officers. These cases had been to the Edinburgh Royal Infirmary or to an outside Eye Specialist and there were no measurements for the spectacle frames given. This necessitated a further examination for frame measurements by the Area Medical Officers. In all, 33 (and four with both distance and reading glasses) pairs of glasses were supplied through the Public Assistance Committee for adult cases. Besides these, 41 glasses were supplied to children of school age by this Committee; also, six pairs of spectacles were repaired.

A number of pre-school children were examined for errors of refraction and for these it was found necessary to supply eight pairs of spectacles.

(f) Mental Defectives—Institution Cases.

The provision of Institutional accommodation for mentally defective children has been publicly considered in Fife repeatedly by the various public bodies. As a result of the reorganisation of the various services under one body—The Fife County Council—this important aspect of social work has again been brought to the forefront. Whilst it was known that there were a number of cases requiring institutional treatment, the number of such cases was indefinite. Consequently it was decided to make a survey throughout the County in order to obtain more definite knowledge as to the numbers in different parts of Fife.

As there is a good deal of misconception regarding the different types of mental defectives, the following brief classification may help laymen to understand the social problem which confronts us to-day regarding these unfortunates. Mental defectives can be divided into educable and uneducable. The Education Committee are responsible for the education of the former, and the Mental and Lunacy Committee are responsible for the latter. The former constitute about 1 to 1½ per cent. of the school population, the latter only a small fraction of one per cent. The division of the mentally defective children into educable and uneducable helps us only to a small extent in determining cases suitable for institution or otherwise.

There are the children who are very definitely educable—high grade cases of mental defectives—whose social behaviour and moral conduct is such as to constitute them a definite menace to the community, and their committal to an institution may be necessary even for their own good. Then there are cases where the home conditions are such that the children must be removed, or the cases in whom there is also a physical defect so marked that the child requires nursing care. All these, as well as others, although educable, require institutional treatment. On the other hand, there are " uneducable " cases where the home conditions are such that the child can be properly looked after, and where the need for institutional treatment is not necessary.

In 1932-33 the following number of children were cerified as uneducable mental defectives :—

Dunfermline District	3 (1933)	1 (1932)
Cowdenbeath and Lochgelly District ..	10 „	3 „
Kirkcaldy District	1 „	3 „
Wemyss District	6 „	3 „
North-East Fife	11 „	8 „
	31 „	18 „

In 1933 five children were notified to the Burgh of Dunfermline (in 1932—five), and none to Kirkcaldy Burgh (seven in 1932).

A large number of very low grade cases was brought forward for nstitutional accommodation but eventually about 13 were placed in t. Joseph's Institution (R.C.) for Mental Defectives, Rosewell, 3 in arbert Institution, one in Baldovan Institution and one had to be dmitted to Springfield Asylum. Negotiations are still going on with arbert for some arrangement whereby that Institution would be repared to take in a certain number of Fife cases. Meantime, Larbert in a position to accept odd cases owing to the completion of the ew (Colony) blocks of buildings which will allow vacancies to occur n the old and main building.

OPHTHALMIA NEONATORUM.

A reduction in the number of cases of ophthalmia neonatorum otified has to be recorded. There were 102 as against 122 the pre-ious year. Their allocation to the various districts is as follows:—

Dunfermline District	21
Cowdenbeath and Lochgelly District	39
Kirkcaldy District	8
Wemyss District	26
Cupar District	8
St. Andrews and Anstruther Districts	—
	102

8 cases were removed to Hospital for more intensive treatment.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

The number of cases of puerperal fever notified was 19 (18 in 1932) nd of puerperal pyrexia 19 (26 in 1932). Three cases of puerperal ever and two of puerperal pyrexia died. The number of cases re-noved to hospital was puerperal fever 13, and puerperal pyrexia 12.

PNEUMONIA.

During 1933 the Health Visitors paid about 700 visits to 339 notified ases of pneumonia. These visits were for the purpose of informing ne responsible Medical Officer as to the need for hospital treatment.

EXAMINATION AND CERTIFICATION OF BLIND PERSONS.

Report by Dr. R. A. Krause, Deputy Medical Officer (Welfare).

The Scheme (see Report for 1932) whereby persons in the County f Fife and the two large Burghs of Kirkcaldy and Dunfermline claiming o be blind were medically examined and certified was continued. he clinics at which these examinations were carried out by Drs. raham, MacGillivray and Sampson and the number of cliniques eld are as follows :—

Cowdenbeath	6
Buckhaven	2
Cupar	2
St. Andrews	2
Anstruther	1
Lochgelly	1
Dunfermline	1
Kirkcaldy	2
Total	17

At these clinics there were 246 examinations (County 203, Kirkcaldy Burgh 30, Dunfermline Burgh 13)—230 first examinations and 16 re-examination. There were 46 absentees and two died before being examined. The number of persons certified as blind was :—

County cases	158
Kirkcaldy Burgh	28
Dunfermline Burgh	8
Total	194

and 52 were certified not blind :—

County Cases	45
Kirkcaldy Burgh	2
Dunfermline Burgh	5
Total	52

The further results of the examination were that 130 blind persons (75 males, 55 females) were recommended to have surgical (10 males, 5 females), medical (3 males, 6 females) or optical (2 males, 3 females) treatment. In the case of the " Not blind " persons, 3 men and 2 women were recommended to have surgical, 3 men and 3 women to have medical, and 8 men and 2 women to have optical treatment.

An analysis of the causes of blindness, primary disease or defect, etc., is held over for next year when the bulk of the old cases will have been examined.

EXAMINATION OF MORBID PRODUCTS.

Bacteriological service for the County is undertaken on behalf of the University of St. Andrews by Professor Tulloch, University College Dundee.

The number of specimens submitted for examination by medical practitioners during 1933 was 284, comprising 99 throat swabs, of which 2 were positive diphtheria, 22 bloods negative to typhoid fever, and 163 sputa of which 29 contained tubercle bacilli.

In December 1933, the Public Health Committee approved an annual payment of £150 in settlement of the bacteriological services undertaken for the County Council by St. Andrews University inclusive o

any work done by the Mackenzie Institute, St. Andrews. The arrangement will be re-considered after a year's trial.

The annual payment of £150 is not inclusive of investigations in connection with venereal disease but does cover throat swabs, Widal Test, examination of sputum for tubercle bacilli, examination of morbid material other than those above specially mentioned and of special significance on public health, such as examination of intestinal contents in dysentery, enteric fever, etc., and other investigations such as examinations of milk for contamination, the grading of milk, the examination of milk for tubercle bacilli and the examination of water.

BUILDING BYELAWS.

The plans examined and reported upon in respect of the Landward Area comprised proposals to build 390 new houses and alterations and extensions to 88 existing houses. Plans for the erection or reconditioning of buildings for purposes other than housing involved 63 premises.

HOUSING (RURAL WORKERS) ACT, 1926.

The number of houses approved for grant in respect of renovation and extension under this Act was 219 as compared with 174 in 1932 and 202 in 1931. Certain applications were, as usual, refused for various reasons.

HOUSING.

Account of the housing work of the Department is furnished in some detail in the reports of Drs. MacGillvray and Fyfe for the western and eastern divisions of the County respectively. In October 1933 an estimate of the housing requirements of the County was furnished for the five years 1934-38. In the interval, the need for additional housing has been the subject of repeated consideration and amendment in favour of additional provision.

The rent for local authority housing has also received extended consideration and the rents now approved will tend to ensure that those living in the worst houses will have the chance on occasion of securing the tenancy of a new house within their means.

MILK SUPPLY.

Roll of Accredited Clean Milk Producers.—In conjunction with Dr. Cunningham, Edinburgh and East of Scotland College of Agriculture, a scheme subsequently approved by the County Council, was framed for the purpose among others of stimulating the interest of producers in a pure milk supply and providing some assurance of the maintenance of a satisfactory standard of production.

The Department of Health for Scotland criticised the proposal adversely mainly on the ground that it would lead to confusion with the licences issued under the Milk (Special Designations) Order, 1930. On the other hand, I was definitely in favour of the scheme as it was obvious that the provisions of the Milk (Special Designations) Order do not appeal to the generality of dairymen throughout Fife and I felt satisfied that the establishment of a roll of accredited clean milk producers, although tentative and experimental in nature, would probably do much to raise the standard of clean milk production throughout the County.

The Scheme came of force on 1st April 1934. Briefly, it provides that every dairyman whose milk is found to comply with the defined standard of bacteriological cleanliness and butter fat content will be given a certificate and his name will be inscribed on the Roll of Accredited Clean Milk Producers.

In regard to the ordinary milk supply of the County, continuous progress towards a higher standard of cleanliness of production, both in respect of premises and methods, is being made. Generally, throughout the County, the food value of the milk produced is satisfactorily in excess of the statutory minimum standard defined by regulation but, unfortunately, the dairyman producing milk by methods admitting of the addition thereto of much extraneous matter, manure and dirt and thus altering dangerously its wholesomeness and purity is still more common than he ought to be.

In the Annual Report for 1931, I referred at some length to the measures which appeared to me necessary by the Government if a disease-free milk is to be placed on the market. In the interval much advice, by authoritative committees—official and other—has been tendered to the Government regarding the means and policy for obtaining a safe, wholesome and tuberculosis-free milk supply without, so far, any obvious result. The question is relatively of more importance to Scotland than to England as human infection by the bovine tubercle bacillus is much more common here than south of the Border and a factor in this higher prevalence is probably the frequency of the unregistered dairy where one or two cows are kept for the supply and convenience of neighbours and employees.

The type of dairy where one or two cows are kept on the ostensible excuse that the milk sold is for the convenience of neighbours and that in areas where there is an ample supply available from the registered producer, where the cowshed or byre is unsatisfactory and in contravention of the majority of the Dairy Byelaws, and where the owner refuses to register is much too frequent. One would be glad to see such dairies suppressed in the public interest but the terms of the Milk and Dairies (Scotland) Act, 1914, do not admit of such action.

It will be noted from the District Report for East Fife that there has been an increase in the number of licences issued for the production of milk under the Milk (Special Designations) Order, 1930.

The following excerpts from the Annual Report for 1933 of Mr. R. G. Anderson, F.R.C.V.S., County Veterinary Inspector, are subscribed for information :—

" 1. *Condition and Cleanliness of Cattle.*

The general condition of the cows in the herds has been noted, in the majority of cases, as very good.

Apart from disease, the somewhat poor condition of individual cows, has mostly been noted in heavy milking animals, especially in such as have had none, or only a short period of prelactation rest.

Cleanliness of cows has also been noted as generally good. Exceptions are temporary lapses from routine care, on mixed farms, where urgency of other work is allowed to interfere with the work of the dairy. In some cowsheds a bad construction and planning of the floor space makes the work of keeping cows clean a problem of constant difficulty. Details which do not receive the regular or timely attention which is necessary to maintain a high standard of management are neglect to keep the tails, flanks and udders of cows clipped. As distinct from careless neglect in these matters, a professed consideration for the comfort of the cow—long coat and hair on udders for warmth and long tail hairs to kept off flies—can only be taken as inadmissible excuses as these considerations are in fact of no practical value for the assumed necessary comfort of the animal. It is in all cases insisted that a prior claim belongs to the question of purity of the milk, which cannot be secured and may be directly and seriously compromised by the neglect of attention to these details.

As regards " Methods of production," these again show a fairly high level of careful attention.

Failure to discard the fore milk and the use of the same cloth and water for wiping udders of the cows and hands of the milkers are the most commonly noted and corrected faults.

The neglect of daily cleansing of the rear portion of the cow stall and side walls of byres requires daily remark in a round of inspections.

Covering lids for the collecting pails have been very generally introduced to the great saving of contaminations from splashings in the cowshed and dust, while being conveyed from the byre to the dairy.

It is, I believe, accepted that serious contaminations of milk, as estimated by bacterial count, are generally found to be due to imperfectly sterilised milk vessels and appliances rather than to neglect in methods of production, the importance of which must not on that account be minimised.

(*a*) Nature of fodder and diet as affecting the quality of the milk.

No instance has been noted of any undesirable or deleterious effect of diet on the quality of the milk.

Attention has been drawn in a few observed cases to the practical error of feeding stuffs with a pronounced odour or flavour, such as turnips, to cows before milking.

In one case an odour was temporarily given to a milk supply by the use of a lime wash to which chloride of lime had been added.

Butter-fat content, too readily assumed as the sole or most important food constituent of milk, and probably of quite minor importance so far as growing animals are concerned, is not readily affected by the nature of the food supply; certainly not in an upward direction which requires a constitutional basis only acquired by attention to breeding.

Where genuine milk is found to be under the legal standard, investigation invariably discovers the cause in a cow or cows giving milk of a specially low butter-fat content. In a small dairy the only practical course is to dispose of the unsatisfactory cow, which, as an individual may be notable as a cow having a large milk yield.

(*b*) Number of diseased cows found—specific diseases.

The following shows the various diseased conditions, apart from tuberculosis, found on inspection of herds :—

Diseases of the Udder.				
Teats.	Injuries.	Atrophy.	Mammitis.	Non-Tuberculous Indurations.
7	20	763	49	115

Non-tuberculous indurations are the after effects of mammitis or injury. Atrophy—loss of substance—are also the result of previous attack or attacks of mammitis or of injury or of obstruction in the teat canal or occlusion of its orifice.

Quite a number of cases of atrophy and blind teat have again been noticed in heifers at their first calving, i.e., having one or more quarters of the udder which never yielded milk.

The numbers shown as of atrophy, no doubt in many cases represent the same animals seen twice during the year. To a lesser extent this also applies to non-tuberculous induration. Such animals are not so readily retained in the herd as simple atrophied cases.

Injuries are mostly treads on the udder or teats, inflicted while recumbent, by the neighbouring cow. Stalls too narrow or too broad are a contributing cause. Also may be due to gores by the horns or tears with barbed wire.

Owing to the examination of a milk sample from their own herds by a distributing Company being unsatisfactory an intensive examination of the milk of each cow was made, and as a large number

were reported by the investigating Institute as affected with mammitis the majority of the cows were disposed of.

There was no evidence of any harmful effects from the use of this supply—the careful management excluding the milk of all cows having observable signs or milk symptoms from use—by those consuming it in the raw state, nor was there evidence that it was capable of harm because of the nature of the infection. As the supply would be pasteurised before reaching the consumer no risk was involved in its use. The costly method of remedy adopted could only be the result of voluntary action by the owners, as no powers exist to demand disposal of affected animals. Whether the advice to do so was sound or had any justification must remain a matter of opinion.

Other diseased conditions were :—Johne's Disease 3, Actinomycosis 2, Digestive Disorders 17, Ringworm 7, and various lamenesses.

The compensation clauses of the Tuberculosis Order have the effect of causing cases of Johne's Disease or other wasting or incurable conditions to be reported under that Order.

It is a reflection on the knowledge and powers of observation of owners that undoubted cases of tuberculosis are not so readily reported if the cow is giving an economic yield of milk.

This is unfortunate, apart from the question of milk supply, as tuberculosis is highly infectious to the other cows which are kept in contact with the cow whose frequent coughing should at once secure her isolation, which is almost never found to be practised.

Retention of the afterbirth, probably due to infection with the Bacillus Abortus and in most cases following abortion was noted in 16 cases.

Undulant fever in man has been attributed to milk from such cows and it may be necessary to have introduced more specific restrictions than are contained in Sections 13 and 14 of the Milk and Dairies (Scotland) Act, 1914.

There were two outbreaks of anthrax in dairy farms during the year. Both dairies belonged to the same owner and feeding stuffs probably introduced the infecting agent. In this case pea meal was the suspected channel of conveyance.

(c) Milk from diseased cows is invariably withheld from the milk supply or given to animals. The latter, especially the suckling by calves of cows with diseased udders, is extremely bad practice. The udder may be tuberculous with disastrous consequences.

Such cows should be milked and the milk boiled—that from the diseased quarters being disposed of in the drains. It is of course much easier to turn the cow out and let an unfortunate calf do the work of remedial vacuation of the udder.

It may be said that where the condition of the cow—sick or immediately after abortion—or where the milk is unmarketable—coloured, stringy or readily sours—it is discarded without hesitation. Otherwise, even from udders showing physical abnormality—enlargement, hardness—it is continued to be used. Hence tubercle-infected milk which may appear normal is apt to be used for long periods. Greater specification is here again required in Sections 13 and 14 Milk and Dairies (Scotland) Act, 1914.

The references there presumes knowledge of disease, which the Courts do not recognise.

To bring the dairyman in, as the active partner he ought to be, the conditions " indicative " of tuberculosis of the udder, should be specified, conditions whose existence he can be presumed to know. Hardness is the principal element. Its detection depends on feeling the substance of the udder. No dairyman makes a practice of trying to detect hardness. The Section should contain " hardness of a quarter or quarters or part of a quarter showing no pain on pressure." A note should be added that as hardness is a condition recognisable only to the feel (pressure), the duty of periodically doing so, is by this Section imposed on the owner.

2. *Inspection of Cattle.*

(a) Registered Dairies.

District.	No. of Dairies.	Average No. of Cows.	No. of Cows Inspected.	Annual Frequency of Inspection.
Kirkcaldy ..	114	2909	6087	Twice.
Dunfermline	83	2047	4775	,,
St. Andrews	82	1548	3570	,,
Cupar ..	57	926	2028	,,
Burghs ..	44	588	1274	,,
Total ..	380	8018	17734	

(b) Exempted Premises.

	8	23	52	,,
	388	8041	17786	
Other Farms	..	..	43	
Totals ..	388	8041	17829	

Visits additional to a bi-annual inspection and visits to other farms included in above, were made in response to reports of suspected cases of tuberculosis and visits to dairies in the neighbourhood of such, while in the district.

3. *Bovine Tuberculosis.*

(*a*) Number of cows found on clinical examination of herds.

The following statement shows the number of cases of tuberculosi dealt with under the Tuberculosis Order 1925 during the year. The majority were found on routine inspection of the herds, clinical examination being supported by the microscopical examination of milk sample

n the case of udder infections. A small proportion of the cases dealt with were reported by owners or their Veterinary Surgeons, mostly in premises not dairies.

District.	Tuberculosis of Udder.	Tuberculosis Emaciation.	Chronic Cough.	Total.
Kirkcaldy ..	7	..	8	15
Dunfermline	6	1	6	13
St. Andrews	4	1	5	10
Cupar ..	3	..	2	5
Burghs ..	2	..	2	4
	22	2	23	47
Other Farms	6	1	3	10
	28	3	26	57

Above includes one case of chronic cough in St. Andrews District dealt with by a private practitioner during my vacation.

The post-mortem classification of above cases is as follows :—

	Tuberculosis of Udder.	Emaciation.	Chronic Cough.	Total.
Not affected	..	..	..	
Advanced ..	17	..	20	
Not Advanced	11	2	6	
	28	2	26	56
Cow died before removal, no p.m. made				1
				57

It is notable that two cases of emaciation should on post mortem be "Not Advanced" cases of tuberculosis. These illustrate the deceptive misleading of appearances, which on the part of owners and others, are diagnosed off hand with the utmost confidence and emphasis, and, in the case of animals which cannot be said to show definite clinical symptoms are apt to be the cause of disputation. Further difficulty rests in the fact that an animal may show lesions of tuberculosis on post-mortem examination which would classify the case as one of "Advanced Tuberculosis" yet which in life seemed in perfect health. This is seen in the slaughter of fat cattle.

A cow may be similarly affected with Tuberculosis, and be in poor or even emaciated condition from another cause and reported under the Order. But like the fat bullock she shows no symptoms of tuberculosis and is not taken under the Order. The post-mortem shows extensive lesions of tuberculosis. (Serious Membranes, pleura and peritoneum which do not seem to affect health), and some other disease, Johne's Disease or Traumatic Pericarditis which was the cause of her poor condition and of all the symptoms shown in life. Such a case not taken under the Order and killed by the owner and post-mortemed gives opportunity for gleeful remark or grave complaint on the Veterinary Inspector's action, which action is defined and limited by the

Order to the symptoms shown in life. Any other course would, in effect, mean that the Local Authority should bear the loss of every cow no matter what actual cause of illness and probable death existed. The weakness in the post-mortem evidence in such cases lies in the failure to show that the lesions, which may be extensive, affected vital organs and could produce the symptoms shown.

I am of opinion that so far as clinical examination and the exhibition of symptoms go, disease of the lungs (substance of the lungs) and udder are alone recognisable.

(*b*) Number of cows found tuberculous after the Tuberculin Test.

There were no cases of cows submitted to the Tuberculin Test in the routine inspection of herds.

Reaction to a Tuberculin Test is not a clinical symptom within the meaning of the Tuberculosis Order 1925.

(*c*) Total number of cows to which the Tuberculin Test was applied under Section 22 of the Milk and Dairies (Scotland) Act, 1914.

No tests were applied under this Section.

(*d*) Number of Dairies holding graded milk licences in respect of tubercle-free herds.

Certified (or Grade A. (T.T.)).

Name and Address.	Average number of herd.	Estimated number of gallons produced per annum.
Lady Victoria Wemyss, Wemyss Castle, East Wemyss	26	21,650
Mrs. Younger, Mount Melville, St. Andrews	22	18,000
Wm. Lohoar, West Balrymonth, St. Andrews	63	48,000
Lord Cochrane of Cults, Hospital Mill, Springfield	45	35,000
Lord Cochrane of Cults, Cults Mill, Pitlessie	55	39,000
Jas. Clement, Kilrenny Mill, Anstruther	34	26,000

(*e*) Number of any other dairies known to have tubercle-free herds

None.

4. *Miscellaneous.*

(*a*) List of Dairies holding licences for the production of Grade "A" milk.

Name and Address.	Average number of herd.	Estimated number of gallons produced per annum.
Messrs. R. & W. Anderson, Monturpie, Largo	21	15,000
Mrs. Brunton, Grange Farm, Elie	19	14,000
John Black, Grangehill Farm, Elie	20	15,000
Richard Telford, Lathallan Home Farm, Colinsburgh	23	17,500

(*b*) Notes on any samples taken for examination in terms of Section 21 of the Milk and Dairies (Scotland) Act 1914.

No samples were taken under this Section.

(*c*) A Statement of the extent to which Sections 13 and 14 of the Act are being complied with.

Notifications under these Sections are rarely made. Previous remarks have made reference to these Sections of the Act.

Inspection of Graded Milk Herds.

Certified and Grade "A" (T.T.).

Dairy.	Cows.	Heifers in Calf.	Passed Test.
West Balrymonth, St. Andrews ..	59	14	73
Hospital Mill	45	..	45
Springfield	53	..	53
Cults Mill	28	..	26
Pitlessie	41	..	37
Interim Purchases	29	..	19)
Mount Melville	27	..	25
St. Andrews	27	..	25
Kilrenny Mill, Anstruther ..	34	17	41
	343	31	344

Thirty visits were made in connection with the Tuberculin Testing of above herds and purchases.

In addition 3 visits on clinical inspection of each of the above and Grade "A" herds were made during the year.

5 Certified herds .. .. .. 15 visits
4 Grade "A" .. .. .. 12 ,,

The Grade "A" T.T. herd at Wemyss Castle is tested and inspected by a private Veterinary practitioner.

Certificates in accordance with the Act were submitted to the Local Authority for each Test and Clinical inspection."

PORT SANITARY REGULATIONS (SCOTLAND), 1933.

These Regulations, which came of force on 1st May 1933, embody in amended form in one code all prior legislation relative to the sanitary control of shipping and define special measures applicable to ships infected with smallpox, typhus fever, cholera, plague and yellow fever.

For the purpose of their enforcement, the Regulations confer and impose powers and duties on the Medical Officer of Health.

The chief ports of the County are Methil, Burntisland and Tayport. Incoming cargoes are timber and wood pulp from Baltic ports and esparto grass from North Africa (Algiers, Bona, Oran and Susa). Outgoing cargoes are coal.

In conjunction with the Customs Authority, mooring stations for infected and suspected ships have been defined for the ports and creeks of the County.

Every week a list of the foreign ports and seaboards reported as infected with the diseases already mentioned is furnished to the Customs Officers of the County.

The Regulations entail a considerable amount of work as it is necessary for the Medical Officer to visit all ships from foreign infected or suspected ports and seaboards.

HOSPITAL FACILITIES.

These remain as described in recent Annual Reports and there is no material change relative to them to chronicle.

Infectious Diseases Hospitals—Centralisation.—The Department of Health for Scotland in a Report of 10th December 1931 on the Hospital Services of Fife County suggested in broad outline a scheme of hospital co-ordination. The report recommended that the place for the main county infectious diseases provision and for a central hospital is the site of Thornton Infectious Diseases Hospital.

The future policy respecting the centralisation of the infectious diseases hospitals of the County Council was considered by the Public Health Committee in October 1933. The question of centralisation was, however, definitely limited to the two hospitals of Kirkcaldy District, discussion of the same issue relative to the four small fever hospitals in the Eastern Districts of Cupar and St. Andrews being specifically ruled out.

In these circumstances I advised centralised provision at Cameron Hospital of 160 beds, that is 138 new beds in addition to the 22 beds at present provided by the Hospital.

In January of the current year, the County Master of Works was instructed by the Property and Works Committee to prepare plans of the proposed extension.

SICK POOR—MEDICAL CARE.

In December 1933 an amended Scheme was submitted by the Fife Branch of the British Medical Association for the provision of domiciliary medical attendance on the sick poor and other persons for whom the public health authority may be responsible statutorily, on a capitation principle analogous to that of the National Insurance Act.

Under the present system, that of parish medical service, and an inheritance from the late Parish Council, there are patent anomalies in the payment of medical officers. These might be remedied by amendment of the existing system, by adoption of the capitation principle or by tariff payment, etc.

The capitation principle of National Insurance has many virtues and some vices : the latter may easily, I think, be exaggerated but I doubt if any sufficient remedy has yet been found for them.

In all the circumstances, it appears advisable to await the findings of the Committee of Inquiry into the Health Services of Scotland as this subject is, I understand, included within its terms of reference.

MENTAL DEFICIENCY.

At the end of 1932 the position regarding institutional treatment for the mentally deficient remained as defined in the Report for 1932.

Western Division.

Dr. G. M. McGILLIVRAY, Deputy Medical Officer of Health.

The Western Division of Fife, embracing as it does the chief industrial centres of the County, contains approximately three-quarters of the total landward population of the whole County. The chief industry, that of coal mining, has passed through rather lean times but there are now signs of recovery and it is hoped that this, the staple industry of the Western Division of Fife, will come into its own again at no distant date. Unfortunately, with the trend of modern times, machinery in coal mining, as in many other industries, is largely displacing the human element and the problem of unemployment becomes aggravated instead of being abated. It appears very doubtful if all the men formerly employed as miners will ever again be recruited into the army of workers and, having no other vocation, there is no other trade into which they can be absorbed.

The farming community is also suffering from a general depression which has been of long duration and the Milk Marketing Scheme, from which so much was expected and which it was thought would materially help milk producers, does not appear to have met with universal approval among dairy farmers in the area under review. Instead of helping, the dairymen assert that they are much worse off under the Scheme than before. With the imposition of tariffs on imported agricultural produce, however, it is anticipated that agriculture generally will steadily improve and that this, the oldest of all industries, will again take its rightful place as the chief industry and mainstay of the County.

In dealing with the Western Division of Fife it is not considered necessary to report separately on each of the four districts into which this area has been divided under Local Area Committees, viz., Dunfermline, Lochgelly, Kirkcaldy and Wemyss. Reference to these was made in my report for 1932 and the present report will, as far as possible, deal with the area as a whole.

WATER SUPPLIES.

The Western Division of Fife is fortunate in having an exceptionally fine supply of pure water and during the long dry spell in 1933 the sources of supply were abundant and far more than the actual needs of the community. There are three main sources of supply, viz., that of the old Dunfermline District coming from Glendevon and Glenquey, that of Kirkcaldy District at Glenfarg and the Wemyss Water Trust. In addition to supplying the Landward Areas several burghs derive their supply from these sources, and if need be the above reservoirs, with little addition or expenditure, could supply areas in the Eastern

Division of Fife, including burghs which are in a much less fortunate position and suffered considerably in the past year from lack of rainfall, to replenish exhausted reservoirs.

DRAINAGE SYSTEM.

Supervision of the various Special Drainage Districts, 25 in number, is carried out by the respective Sanitary Inspectors and as these have been fully described in previous reports they need not be gone into again in detail.

The Purification Works at Blairhall village are of insufficient capacity to deal efficiently with the sewage and the distributors of the Fidian Rotary plant are worn out. Crossgates Sewage Works are obsolete but a start was made during the year to link up this village with Dunfermline Burgh Sewer. The boundaries of Crossgates Special Drainage District were also extended to include the villages of Hill of Beath and Halbeath and these villages will also be linked up with the new sewer. Drainage facilities were provided for the village of Kennoway during the year and a large number of the houses have already been equipped with water carriage fitments. No purification of the sewage is undertaken, however, and this in the crude state finds its way to the River Leven to aggravate the already grossly polluted state of the river.

Drainage facilities are still lacking in the following villages in the Western Division of Fife :—Kinglassie, Auchtertool, Chapel, Coaltown of Balgonie and Milton of Balgonie in Kirkcaldy District and at Cairneyhill, Hillend, Oakley, Donibristle, Comrie, Wellwood and Lassodie in Dunfermline District. Of the latter Lassodie, Oakley and Donibristle are decadent villages and at no distant date they will merely remain as memories of the past. The entire village of Oakley will soon be demolished and the inhabitants will be housed in a new housing scheme further west, while at Lassodie, houses are being demolished as they become vacant and very soon no trace of the village will remain. Donibristle is in much the same position as, owing to lack of employment in the neighbourhood, families are drifting elsewhere and at no distant date this village will also be wiped off the map.

Owing to cost it may be impossible to provide drainage at places like Chapel, Cairneyhill and Hillend but at others mentioned above some effort should be made to provide an adequate drainage system so that houses can be modernised and brought up to standard.

Dealing with existing methods of sewage disposal some might be described as quite good and satisfactory while others are distinctly bad and unsatisfactory. All but three of the Special Districts in Dunfermline District discharge their sewage direct to the Forth without previous screening or treatment and this method of disposal is quite good and gives no rise to complaint. Blairhall as noted above requires

certain improvements to the existing sewage disposal works and at Crossgates the enlarged Special District will be in a satisfactory position when the new sewer is finally completed. The sewage disposal works at Saline are modern and adequate for the needs of the area.

In Kirkcaldy District matters are less favourable as in most of the Special Drainage Districts no attempt has been made to deal effectively with the sewage so as to prevent gross pollution of the rivers. Thus Lumphinnans, which is linked up with Lochgelly Burgh Sewers, discharges all sewage direct to the River Ore without any attempt at purification. The densely populated area of Lochore and Glencraig discharges crude sewage to the same river and what sewage there is at Kinglassie discharges to the Lochty burn in a crude state apart from that which comes from the new Council houses. These are provided with a septic tank but the effluent could not be regarded as particularly good although solids are eliminated. Further east the sewage from Windygates and Balcurvie and also from Kennoway and Methilhill runs direct to the River Leven in a crude state. As noted in a previous report the purification works for dealing with Auchterderran Special District (Bowhill and Cardenden) although fairly satisfactory become flooded very readily by the rise of water in the River Ore during heavy rain. At Thornton the sewage works are practically obsolete and unable to deal effectively with the increased amount of sewage from the various housing schemes that have sprung up in the past few years. Satisfactory disposal of the sewage from Rosie, Boreland, East Wemyss and West Wemyss is obtained by running it direct to the Firth of Forth. At Kelty owing to subsidence from underground mineral workings the sewage filters subsided but the effluent pipe remained practically untouched with the result that the filters became water-logged and useless. The difficulty was temporarily overcome by lowering the effluent pipe, the mouth of which was 1 ft. $6\frac{1}{2}$ in. higher than the filter end.

RIVERS POLLUTION.

Pollution of the Rivers Ore and Leven are too well known to require special mention in this report. The conditions are fully described in the third report of the Scottish Advisory Committee on Rivers Pollution Prevention—Rivers Leven and Ore—issued during the year. With two exceptions all the coal pits in the area take special precautions by means of settlement ponds or lagoons to keep back coal dust from entering the rivers in question. At the Julian Pit and at Wellsgreen Pit gross pollution from coal dust was taking place by running the washery water direct to the Ore and the Den burn respectively, but in both cases steps are now being taken to settle the dust in ponds in order to abate the nuisance.

OFFENSIVE TRADES.

There are no offensive trades conducted within the Western Division of the County.

MISCELLANEOUS.

Any other sanitary matters calling for comment.

Under this heading attention might again be drawn to the continuance of a nuisance at Inverkeithing from stone dust entering the houses as a result of stone crushing operations at Prestonhill Quarry. Numerous complaints were received during the year from tenants at Preston Crescent within the Burgh of Inverkeithing and although the matter has been taken up from time to time with the Quarry owners they have taken no steps to effectively abate the nuisance. Complaints by the people resident here were first received in 1930 and although a wooden shield was at one time erected on the east side of the stone crusher in order to prevent the dust from being blown across the short distance to the houses in question it proved of no value and the nuisance was in no way abated. The fine grey stone dust penetrates the houses even with doors and windows shut and impregnates food in cupboards and bedding, etc., while the furniture inside and flowers and vegetables in the gardens are constantly being coated when the wind blows from an easterly direction. There can be no question that stone crushing as conducted here is injurious to health and is a nuisance in terms of Section 16 (6) of the Public Health (Scotland) Act 1897. There can also be no question that the Forth Quarry Company have not taken the best practical means to abate the nuisance. I suggested in March 1931 that dust extractors should be employed but the Quarry Company turned this down on account of the cost involved.

As complaints continued to be received from time to time in 1933 from tenants resident in Preston Crescent, Inverkeithing, the matter was referred to the Department of Health for enquiry in September and Dr. Ditmar of the Department visited the quarry which is situated in the Landward Area and also the houses in question on the 27th September 1933. In his report issued in November Dr. Ditmar states that, " In my opinion, what has been done will not be sufficient to mitigate the nuisance ; and the Quarry Company should be called on to instal dust extractors in connection with their crushing machinery so as to suck away the dust and take it to a special closed chamber where it can be dealt with. This is done by other Quarry Companies and is recognised as the only practicable method of dealing with the dust nuisance from stone crushing machinery when it is installed near dwelling-houses."

Since then the Quarry Company have made another attempt to abate the nuisance by covering the screens with boarding but I do not think this will prove effective. It may reduce the amount of fine dust

somewhat during the winter months but in the dry summer weather I am of opinion that the nuisance will again become evident.

Another nuisance referred to in my report of 1932, viz., the smell arising from Grangemouth Oil Refineries which caused serious annoyance to people resident in the Culross-Torryburn Area, has been less apparent during the year and apart from the month of August no complaints were received in this connection. The matter was again taken up by Dr. Wylam, Chief Inspector for Scotland under the Alkali, etc., Works Regulation Act and the smell complained of in August was traced to the pond for the new effluent plant being out of commission owing to a leak which had developed. While this was being repaired the effluent was temporarily diverted into the Grange Burn. Although Dr. Wylam suggested that further work should be carried out with a view to minimising the escape of objectionable odours the management considered that this was unnecessary and should be postponed for a month or so to see whether the conditions would settle down after the effluent plant was in normal working order. No complaints have been received since then and I presume that the action taken by Grangemouth Oil Refining Company has proved effective.

HOUSING AND TOWN PLANNING.

From the housing point of view, 1933 has been a heavy and trying year to Sanitary Officials and the Medical Officer. A large number of housing surveys have been carried out and reports submitted in connection therewith. The actual housing needs for the Area in respect of unfit dwellings, sublets and overcrowded houses and also to house people wishing to get married have been assessed for the five year period 1934-38. These are as follows :—Dunfermline District 200 Lochgelly District including Beath Parish 698, Wemyss District 188 and Kirkcaldy District 62—total 1,148 houses. These figures are in addition to houses already built or approved for erection by the County Council during the year.

It will be seen from the above figures that despite the housing activity displayed in the past in the Western Division of the County there is still a marked shortage of houses for people of the working classes. Sub-letting and overcrowding, especially in certain of the mining communities, is far too prevalent ; notwithstanding the large number of houses already built to replace those unfit for habitation the number of occupied unfit dwellings is still considerable.

In my last report I detailed the number of houses already built in the Western Division of the County by the Local Authority, viz. Kirkcaldy District 1,282 and Dunfermline District 258—a total of 1,540 houses. During 1933 the following additional houses were completed :—Kelty 76, Limekilns 18, North Queensferry 4, Rosie 48 and Thornton 50—a total of 196 houses. Twenty-four of these (Rosi

2 and Thornton 12) were of two apartments and the remainder were ll three-apartment dwellings. In addition to the houses completed uring the year 224 additional houses were under construction as fol- ows :—North Queensferry 16, Kincardine 20, Comrie 60, Rosie 52, oaltown of Balgonie 20, Milton of Balgonie 8, Windygates 16 and inglassie 32. All these are of three-apartments with the exception of our at Kinglassie of four apartments and 12 at Rosie of two apartments. rivate enterprise has again entered the field and the erection of a umber of houses without State assistance was commenced during the ear.

Nothing was done in 1933 under Part I. of the Housing (Scotland) ct 1930 to form Clearance or Improvement Areas.

Housing (Rural Workers) Acts 1926 and 1931.

During the year plans were examined and reported upon in respect f proposed alterations, additions and renovation of 133 houses under he Housing (Rural Workers) Act as follows :—Dunfermline Area 34, eath Area 2, Lochgelly Area 29, Wemyss Area 22 and Kirkcaldy Area 6. These were all approved for purposes of grant under the Act xcept one house in Beath Area where the owner-occupier, a poultry rmer, was considered to be in a better position economically than an rdinary farm worker.

Building Byelaws.

The following plans submitted to the Public Health Department nder the County Building Byelaws were examined and reported upon y the Medical Officer during the year :—

Area.	*New Dwellings. No. of Apartments.*				Alterations to existing dwellings.	New buildings other than dwellings.	Alterations to existing buildings other than dwellings.
	2	3	4	5			
unfermline	1	141	27	3	15	12	6
eath ..	..	1	..	..	..	4	..
ochgelly ..	..	56	7	..	8	9	5
emyss ..	13	64	1	..	19	9	5
irkcaldy ..	..	28	..	..	3	3	5
otals ..	14	290	35	3	45	37	21

It will be seen from the above table that there was considerable ctivity during the year in the building and allied trades. Plans were pproved for the erection of 342 new dwellings and for 37 new premises

for purposes other than housing while 45 existing dwellings were altered or enlarged and 21 other premises were altered. These were all in addition to the work in respect of houses altered or enlarged, etc., under the Housing (Rural Workers) Act 1926 as given above.

FOOD SUPPLY.

Milk.—There are 209 registered dairies in the Western Division of Fife situated as follows :—Dunfermline Area 77, Kirkcaldy Area 65, Lochgelly Area 34, Wemyss Area 22 and Beath Area 11. Only one dairy—Wemyss Castle—produces a designated milk but several retail shops sell certified milk obtained from registered dairies situated outwith the County. The following premises are licensed by Fife County under the Milk (Special Designations) Order (Scotland) 1930 :—

Premises.	Holder of Licence.	Grade of Milk.
Aberdour	Mrs. V. Ferguson, High Street.	Certified Milk.
Dunfermline ..	Dunfermline Co-operative Society.	6 licences *re* vans etc.—pasteurised.
Inverkeithing Burgh	J. McLeod, 75 High Street.	Certified Milk.
Cowdenbeath Burgh	Mr. Carstairs, 101 Broad Street.	Do.
Do. do.	Cowdenbeath Co-operative Society (3 shops).	Pasteurised.
Kinghorn Burgh ..	Pathhead and Sinclairtown Co-operative Society, High Street.	Do.
Burntisland Burgh ..	George Davidson, 9 High Street.	Do.
Lochgelly Burgh ..	Lochgelly Co-operative Society (4 shops).	Do.
Lumphinnans ..	Cowdenbeath Co-operative Society, Main Street.	Do.
Glencraig	Lochgelly Co-operative Society.	Do.
Crosshill	Do. do.	Do.
Lochore	Do. do.	Do.
Bowhill	Do. do.	do.
Cardenden ..	Do. do.	Do.
Leven Burgh ..	Leven Co-operative Society (1 shop).	Do.
Buckhaven Burgh ..	Buckhaven Co-operative Society (2 shops).	Do.
Methilhill	Do. do. (1 shop).	Do.
East Wemyss ..	Lady Victoria Wemyss—Wemyss Castle Dairy.	Grade A.T.T.
Methil Burgh ..	Methil Co-operative Society (6 shops).	Pasteurised.
West Wemyss ..	Dysart Co-operative Society, Main Street.	Do.

A considerable amount of the milk produced in the Western Divisi of Fife is pasteurised before reaching the consumer but it is unfortuna that either certified or Grade A.T.T. milk is not more widely availab as they constitute the only safe sources of supply against tuberculos Pasteurisation of milk though a safeguard to a certain extent again

he spread of tuberculosis may, as has been shown by recent research, ail to eliminate the tubercle bacilli. It is also alleged by many that asteurisation has a harmful effect upon milk and that milk of this ype is unsatisfactory for the feeding of young children and the rearing f young calves. Pasteurisation of milk will kill the ordinary dirt germs ut it does not eliminate the actual dirt and it is therefore necessary o keep the cows and the dairy premises in a thoroughly clean state. o improve matters in this respect the Public Health Department in onjunction with the Edinburgh and East of Scotland College of Agricul- ure have drawn up a scheme of Accredited Clean Milk Producers for he County as a whole and a circular letter explaining the scheme has een sent out to all dairy farmers. Before any producer can be placed n the roll of accredited clean milk producers he must conform to certain onditions laid down, viz. (*a*) agree to take and despatch milk samples nder personal supervision to the advisory Bacteriologist, (*b*) agree to llow the County Agricultural Organiser, the Advisory Bacteriologist r their representatives to visit his dairy at any time and to carry out uch inspections and take such surprise samples as may be deemed ecessary, (*c*) comply with either of the following conditions :—

(1) During a probationary period of 12 months satisfy the Advisory acteriologist that the milk produced by him, when sampled as above escribed, has reached the standards fixed. In the case of producers ho have already submitted monthly samples to the Advisory Bac- eriologist for a period of not less than 12 months and have reached a atisfactory standard, the probationary period shall be six months.

(2) Have obtained 75 per cent. of the available points in a Clean lilk Competition officially recognised by the College of Agriculture and eld within two years of the date of application for certification as an ccredited clean milk producer.

It is to be hoped that dairy farmers will support the scheme whole- eartedly and take full advantage of the expert guidance and up-to-date nformation placed at their disposal by the Edinburgh and East of cotland College of Agriculture to enable them to raise the standard f cleanliness of the milk produced. By submitting samples of milk egularly to the Advisory Bacteriologist producers will be able to udge for themselves how far their efforts are meeting with success and ney can always call for expert advice should the samples submitted or examination continue to prove unsatisfactory when submitted to he bacteriological test.

Meat.—The supervision of the meat supply under the various Acts nd regulations is carried out by the District Sanitary Inspectors who ct as detention and sampling officers. The licensing of slaughter- ouses under Section 33 of the Public Health (Scotland) Act 1897 is tained by the respective Local Authorities—the Town Council in urghs and the County Council in the Landward Area. This in the

case of burghs has led to a sort of dual control in as much as meat inspection is a service which has been transferred to the County Council while the Town Council still retain the right to license a slaughterhouse. It is unfortunate that full control was not vested in the County Council under the Local Government (Scotland) Act 1929 as this would have enabled them to prohibit the use of premises which are unsatisfactory for the purpose.

There are 16 slaughterhouses in the Western Division of Fife County; four of those are private structures situated in Burghs as follows:—Kinghorn 1, Inverkeithing 2, and Culross 1. In the Landward Area there are five private slaughterhouses:—Kincardine, Aberdour, Kelty, Cardenden and East Wemyss. Of the seven public slaughterhouses six are situated in Burghs as follows:—Cowdenbeath, Lochgelly, Leslie, Burntisland, Buckhaven and Leven, while the remaining slaughterhouse, although owned by Markinch Town Council, is just outwith the Burgh boundary and therefore under the control of the County Council for licensing purposes.

Details as to the structure and condition of the various slaughterhouses have been given in previous reports. On the whole they are moderately well kept but lack of cleanliness with regard to implements such as hooks, knives and tables, etc., is fairly general and more care is needed in this respect. Supervision of burgh slaughterhouses is under the control of the respective Town Councils and the County Authority has no jurisdiction over the buildings nor the way in which they are kept.

During the year representation was made to Leslie Town Council by the Medical Officer of Health with a view to having certain alterations carried out and the work considered necessary was sanctioned. This comprised the erection of a hide store, the provision of a better and adequate water supply and a gas boiler for each slaughtering booth. When this work is complete Leslie Public Slaughterhouse will be satisfactory in every way. Certain improvements are also contemplated for Lochgelly Public Slaughterhouse but nothing was done here during the year.

Details regarding the system of meat inspection by Sanitary Inspectors who act as Detention Officers have been given in previous reports and as already stated the system is open to criticism owing to the time available to do the work in many instances being insufficient.

The following table shows the number of animals slaughtered and the weight in lbs. of meat condemned in the slaughterhouses situated in the Western Division of Fife during 1933:—

Area.	Slaughterhouse.	No. of Animals Slaughtered.			Pounds of meat condemned and destroyed.
		Cattle.	Sheep.	Pigs.	
Dunfermline ..	Private (5)	377	915	82	1125
Lochgelly ..	Cowdenbeath Public	1422	2455	903	1[illegible]415
and ..	Lochgelly Public	768	831	460	2432
Beath ..	Private (2)	376	673	90	2341½
Nemyss ..	Buckhaven Public	2098	2842	770	27704
	Leven Public	1060	1876	300	2297
	Private (1)	185	324	53	1223
Kirkcaldy ..	Markinch Public	693	880	184	1502
	Burntisland Public	441	908	147	1523
	Leslie Public	389	380	66	3729
	Private (1)	101	224	26	494½
	Totals	7910	12308	3081	58786

Miscellaneous.

All premises in the Western Division of Fife used for the storage of food or where food is prepared or exposed for sale are satisfactory for the purpose. Sanitary Inspectors as Authorised Sampling Officers supervise the food supply under the various Acts and Regulations and reference to their work in this connection will be found in their Annual Reports.

MEDICAL SERVICES.

Infectious Diseases.

During the year there were 3,002 cases of infectious diseases notified within the Western Division of Fife and the small burghs therein. The numbers notified in the old Landward Districts of Kirkcaldy and Dunfermline were 1,407 and 556 respectively; in 1932 the corresponding figures were 1,332 in Kirkcaldy District and 672 in Dunfermline District. It should be noted, however, that in 1932 Chickenpox was included in the list of notifiable diseases whereas in 1933 this disease ceased to be notifiable and no cases are recorded in the above figures.

The individual diseases and the number of cases recorded in each District was as follows in 1933 :—

Kirkcaldy District.—Scarlet Fever 994, Diphtheria 91, Erysipelas 34, Puerperal Fever 5, Ophthalmia Neonatorum 32, Acute Primary Pneumonia 94, Influenzal Pneumonia 37, Pulmonary Tuberculosis 32, Non-pulmonary Tuberculosis 56, Puerperal Pyrexia 5, Cerebro-spinal Meningitis 4, Typhoid 3, Total 1,407.

Dunfermline District.—Scarlet Fever 245, Diphtheria 55, Erysipelas 42, Puerperal Fever 7, Ophthalmia Neonatorum 29, Acute Primary Pneumonia 74, Influenzal Pneumonia 51, Pulmonary Tuberculosis 15, Non-pulmonary Tuberculosis 23, Puerperal Pyrexia 6, Encephalitis Lethargica 1, Cerebro-spinal Meningitis 4, and Dysentery 4—Total 556.

The number of cases of Scarlet Fever notified in 1933 shows a marked increase over the figures for 1932. In Kirkcaldy District there was an increase of 556 cases, while in Dunfermline District the number was increased by 107. The greatest increase in the incidence of Scarlet Fever occurred in the central mining areas of Lochore, Glencraig and Crosshill and at Bowhill, Cardenden and Kinglassie where the disease was epidemic in form throughout the year. The cases recorded from this area alone were as follows :—January 27, February 87, March 147, April 83, May 68, June 53, July 43, August 42, September 46, October 48, November 42 and December 45. It will be noted from the above figures that the peak of the epidemic was reached in March when 147 cases occurred ; the numbers remained fairly constant from June to December. In the other areas of Kirkcaldy District and in Dunfermline District, although there was a considerable increase in the number of cases recorded Scarlet Fever never reached epidemic form.

Cases of infectious diseases occurring in burghs will be included under transferred services at the end of this report. The number of notifiable infectious diseases recorded in the Western Division including small burghs during 1933 was as follows :—Typhoid Fever 3, Scarlet Fever 1,815, Diphtheria 202, Erysipelas 172, Puerperal Fever 17, Ophthalmia Neonatorum 94, Malaria 1, Dysentery 4, Encephalitis Lethargica 1, Acute Primary Pneumonia 253, Acute Influenzal Pneumonia 13, Puerperal Pyrexia 14, Cerebro-spinal Fever 13, Pulmonary Tuberculosis 106, Non-Pulmonary Tuberculosis 167—Total 3,002. Of these 2,294 were treated in hospital and 708 were cared for at home. Twenty-three additional cases notified in a previous year were removed to hospital for treatment.

With reference to the great increase in the number of cases of Scarlet Fever occurring in Lochgelly Area in 1933 it was found that the patients were fairly evenly distributed over the entire population. The disease was by no means confined to any one section of the community and pre-school children with adults formed approximately one half of the notified cases. No closure of schools was enforced as this was considered unnecessary in view of the widespread nature of the epidemic. Milk supplies were carefully investigated from time to time and the inspection of pupils attending any schools in which there appeared to be an unusual number of Scarlet Fever cases occurring proved unavailing in the efforts made to check the spread of infection. I think there can be no question that lack of immunity generally was largely responsible for

he large number of cases recorded in this area during the year as no erious outbreak of Scarlet Fever has occurred here for a considerable eriod and the bulk of the population were not protected in any way. 'ortunately the disease was of a comparatively mild nature and few eaths were recorded.

HOSPITAL AND AMBULANCE FACILITIES.

The hospitals available for the treatment of cases of infectious diseases re as recorded in previous reports, viz., Dunfermline and West Fife nfectious Diseases Hospital for cases occurring in Dunfermline District ncluding the Parish of Beath and the burghs situated in this area ; Thornton Infectious Diseases Hospital (including the Smallpox Hos- ital) and Cameron Infectious Diseases Hospital for cases occurring in Lochgelly, Kirkcaldy and Wemyss Areas with the small burghs situated herein.

In view of the large number of cases of Scarlet Fever occurring hroughout the year the hospitals at Thornton and Cameron Bridge vere unable to deal with all patients requiring hospital treatment and ases had to be diverted to St. Michaels Hospital, St. Andrews Hospital, Dvenstone Hospital and Auchtermuchty Hospital in the Eastern Division of the County as bed space became available. Some were also ent to Dunfermline and West Fife Infectious Diseases Hospital when he other institutions became overcrowded.

Cameron Hospital was almost entirely given over to the treatment of ases of Scarlet Fever during the year. Of 525 patients admitted to his hospital 519 were suffering from Scarlet Fever, 2 from Diphtheria, Laryngitis, 1 Erysipelas, 1 Whooping Cough with Pneumonia and case of German Measles. Although the hospital is recognised by the Department of Health as having accommodation for only 22 patients he average number of occupied beds throughout the year numbered 6, the highest being on 19th December when 60 patients were being reated and the lowest on 13th September when there were 23 patients.

At Thornton Hospital all types of infectious diseases are treated and luring the year 1,003 fresh cases of the various infections were admitted. Although the premises are only supposed to accommodate 60 patients he average number of occupied beds throughout the year was 86·84. The highest number of cases recorded was on the 15th November when here were 116 patients under treatment and the lowest number on any ne day was 61 on 1st January 1933. One hundred and ten operations were performed under general or spinal anaesthesia. The cases admitted to Thornton Hospital during the year were as follows :—Scarlet Fever 625, Diphtheria 217, Typhoid Fever 4, Acute Primary Pneumonia 4, Whooping Cough with Pneumonia 3, Abscess of Lung 1, Pulmonary Tuberculosis 1, Measles 1, Puerperal Fever 16, Cerebro-spinal Meningitis 4, Tuberculous Meningitis 1, Streptococcal Meningitis 1, Encephalitis Lethargica 3, Post Encephalitis 1, Pleurisy 1, Erysipelas 19

Ophthalmia Neonatorum 7, case of poisoning 1, Septicaemia 1, Dermatitis 1, Tetanus 1—Total 1,003.

At both Thornton and Cameron Hospitals the accommodation was overtaxed throughout the year and great credit is due to the respective Matrons and their nursing staffs for the whole-hearted way in which they overcame all difficulties. Lack of proper kitchen accommodation greatly hampered the work of the domestic staffs and the lack of adequate facilities for cooking for the greatly increased number of patients made this work more difficult and trying than it would otherwise have been.

Dunfermline and West Fife Infectious Diseases Hospital.

There were 1,146 admissions during the year and the average number of beds occupied was 100. The highest number of cases was recorded on the 17th November when there were 181 patients in hospital; the lowest number of occupied beds was 63 on the 18th March 1933. Six surgical operations were carried out under general or spinal anaesthesia and 20 minor operations were also performed.

The Randolph Wemyss Memorial Hospital.

During the year 564 patients were admitted and the average number of beds occupied was 21. Four hundred and thirty-six operations under general or spinal anaesthesia were performed and 20 minor operations were also carried out. There were 358 patients seen in the out-patient department of this hospital and the total attendances at the out-patient department during the year numbered 1,423.

The Combination Home and Hospital, Thornton.

During the year 169 patients were admitted and the average number of occupied beds was 43. There were 522 attendances at the out-patient department of this hospital; no surgical operations were performed here during the year.

Ambulance Facilities.

These were on the whole quite satisfactory apart from a period when Thornton Infectious Diseases Hospital when the old ambulance broke down. The loan of another vehicle was obtained from one of the small hospitals in the Eastern Division of the County but lack of a suitable conveyance over a considerable period greatly handicapped the work of the hospital. There was far too great delay in securing a new ambulance to replace the old one which was completely worn out. It was obviously unworthy of repair and should have been scrapped and replaced at once.

PORT SANITARY ADMINISTRATION.

With the coming into operation of the Port Sanitary Regulations (Scotland) 1933 all previous regulations dealing with infectious diseases and the deratisation of ships, etc., were annulled. The new regulations re-enact in one code all former provisions governing the sanitary control of shipping inclusive of special measures now laid down with regard to smallpox and typhus fever.

Each week a list of infected ports at home and abroad is made out from the Ministry of Health return and submitted to the Chief Preventive Officers at Methil, Burntisland and Rosyth and all vessels arriving from an infected port are detained until the boat and crew have been examined by the Medical Officer of Health. A standing exemption has been granted in terms of Article 14 (1) of the 1933 Regulations to enable any ships desirous of entering a port and having on board any person suffering from one of the ordinary infectious diseases to proceed to its berth or place of mooring.

In terms of Article 10 (1) Mooring Stations have been defined. As it is impracticable to fix mooring stations within the docks at the above-named ports arrangements have been made when necessary to fend off ships from the quay wall with the gangway up and rat-guards affixed to all hawsers connecting the ship with the shore. Mooring stations outwith the docks have been fixed as follows :—

Methil.—Largo Bay ; at a distance of not less than one mile from Methil Pier.

Burntisland.—Burntisland roads.

St. Davids and Inverkeithing.—Inverkeithing Bay.

The above-mentioned places are not approved ports and the fumigation of ships is not undertaken by the Local Authority ; no deratisation exemption certificates are granted.

WORKSHOPS AND WORKPLACES.

Five hundred and sixty-seven visits of inspection were made to factories, workshops and workplaces in the Western Division (Landward Area) of Fife during 1933. Certain defects noted during inspection such as want of cleanliness and insufficient sanitary accommodation, etc., were remedied. The usual tabular statement of proceedings under the Factory and Workshops Act 1901 has already been submitted to the Secretary of State for Home Affairs.

TRANSFERRED SERVICES IN BURGHS.

The following account of services in Burghs transferred to the County Council in terms of the Local Government (Scotland) Act, 1926 is submitted but in the Burghs of Culross, Inverkeithing, Cowdenbeath, Lochgelly, Leslie, Markinch and Kinghorn all services are dealt with

by the County Medical Officer and separate Annual Reports in respect of these have already been compiled for the information of the respective Town Councils :—

COWDENBEATH BURGH.

Infectious Diseases.—The incidence of infectious diseases during 1933 was very similar to that of 1932. During the year 188 cases of infectious diseases were recorded while in 1932 the number excluding chickenpox was 183. Scarlet Fever showed an increase of 9 cases, erysipelas an increase of 11 cases and puerperal fever an increase of three cases, while there were 11 fewer cases of diphtheria and a decrease of 9 in the number of ophthalmia cases notified when compared with the 1932 figures. Tuberculosis also showed a decrease of 11 cases (pulmonary 3, non-pulmonary 8). The following cases were notified during the year :—Scarlet Fever 72, Diphtheria 7, Erysipelas 25, Puerperal Fever 3, Ophthalmia Neonatorum 9, Acute Primary Pneumonia 16, Influenzal Pneumonia 23, Pulmonary Tuberculosis 12, Non-Pulmonary Tuberculosis 16, Puerperal Pyrexia 1, Cerebro-spinal Meningitis 4—Total 188.

Milk and Dairies (*Scotland*) *Act* 1914.—There are two small dairies registered for the production of milk within the burgh. These are kept in a clean and satisfactory condition. In terms of the Milk (Special Designations) Order certified milk is sold by one retail shop (Carstairs, 101 Broad Street) and Cowdenbeath Co-operative Society have three shops licensed for the sale of pasteurised milk.

Meat Inspection.—The public slaughterhouse, though perhaps somewhat antiquated, is satisfactory for the purpose and is always found to be well kept. The total number of animals slaughtered and the weight in lbs. of meat condemned during the year has already been given in the text of the report for the Landward Area.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 12,772 ; this shows a decrease of 69 as compared with the estimated population for the preceding year. The corrected births for 1933 was 236 (M. 127, F. 109), which is 18 less than in 1932 and equivalent to a birth rate of 18·5 per 1,000 estimated population. There were 11 illegitimate births or 4·6 per cent. of the total births.

The marriages in 1933 numbered 84 and the marriage rate was 6·6 per 1,000 estimated population. In 1932 there were 90 marriages and the marriage rate was 7·1.

The deaths in 1933 numbered 119 (M. 70, F. 49), equivalent to a corrected and adjusted death rate of 9·3 per 1,000 population. In 1932 there were 150 deaths and the death rate was 11·7 per 1,000. The death rate for all Tuberculosis was 0·39 per 1,000 and that for Pulmonary Tuberculosis was also 0·39. In 1931 the corresponding death

rates for Tuberculosis were 1·18 and 1 respectively while in 1932 the rates were 0·70 and 0·31.

The infantile mortality rate was 51 per 1,000 births, a figure which is very satisfactory. In 1931 the infantile mortality rate was 114 and in 1932 the figure was 79.

The natural increase of population as shown by the excess of births over deaths was 117.

INVERKEITHING BURGH.

Infectious Diseases.—There was a slight increase in the number of cases of infectious diseases notified in 1933 in contrast to the number received in 1932. Seventy-one cases were notified to the Medical Officer of Health, there being an increase of 9 cases of Scarlet Fever, 2 of Diphtheria and 6 of Tuberculosis (Pulmonary 3, Non-Pulmonary 3). The cases notified were as follows :—Scarlet Fever 43, Malaria 1, Diphtheria 6, Erysipelas 2, Ophthalmia 1, Acute Primary Pneumonia 2, Influenzal Pneumonia 1, Pulmonary Tuberculosis 7, Non-Pulmonary Tuberculosis 6 and Puerperal Pyrexia 2—Total 71.

Milk and Dairies (*Scotland*) *Act* 1914.—There are three small dairies within the Burgh registered for a total of 21 cows. Under the Milk (Special Designations) Order Certified milk is also sold by J. McLeod, 75 High Street, Inverkeithing. This is obtained from a certified herd outwith Fife County.

Meat Inspection.—There are two private slaughterhouses in Inverkeithing Burgh and although both are of rather poor construction they are reasonably well kept. All animals slaughtered are inspected by Mr. Forrest, Detention Officer, and meat inspection here is carried out in a very satisfactory manner. The number of animals slaughtered and the weight in lbs. of meat condemned in the burgh is included in the tabular statement—Dunfermline Area—in the general report. The number of animals slaughtered in the two private slaughterhouses during the year was as follows :—Cattle 213, sheep 551, and pigs 84, while 797 lbs. of meat were condemned during that period.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 3,317. The corrected births for 1933 was 52 (Males 27, Females 25), which is equivalent to a birth rate of 15·6 per 1,000 estimated population. There were three illegitimate births or 5·7 per cent. of the total births. The marriages in 1933 numbered 15 and the marriage rate was 4·5 per 1,000 estimated population. Deaths in the Burgh during 1933 numbered 49 (Males 30, Females 19), equivalent to a corrected and adjusted death rate of 14·7 estimated population. Fourteen of the deaths were attributed to infectious diseases as follows :—Diphtheria 2, Influenza 2, Tuberculosis 6 (pulmonary 5, non-pulmonary 1), Pneumonia all forms 3 and other Puerperal causes 1. Five children under the age of one year died

during 1933, the infantile mortality rate being 96·1 per 1,000 births. The infantile mortality rate for 1932 was 81·6 per 1,000 births. Four of the five infant deaths were due to congenital debility, premature birth or malformation and it is possible that better provision for the antenatal care of mothers would reduce this too frequent cause of infant deaths.

The natural increase of population as shown by the excess of births over deaths was 3 during 1933.

CULROSS BURGH.

Infectious Diseases.—During the year 14 cases of infectious diseases were notified within the Burgh of Culross. These were as follows :— Scarlet Fever 6, Erysipelas 1, Ophthalmia Neonatorum 1, Acute Primary Pneumonia 3, Influenzal Pneumonia 1, Pulmonary Tuberculosis 1, and Non-Pulmonary Tuberculosis 1.

Meat Inspection.—There is a private slaughterhouse of good construction within the Burgh and the Detention Officer attends on the days fixed for slaughter. During the year 50 cattle and 81 sheep were slaughtered and 83 lbs. of meat were condemned and destroyed.

Vital Events.—The population of the Burgh as estimated to the middle of 1933 was 522. The corrected births for the year numbered 8 (Males 4, Females 4), which is equivalent to a birth rate of 15·3 per 1,000 estimated population. The marriages in 1933 numbered 12 and the marriage rate was 23 per 1,000 estimated population. Deaths in the Burgh during 1933 numbered 10 (Males 3, Females 7) equivalent to a corrected and adjusted death rate of 19·1 per 1,000 estimated population. Only one child under the age of one year died during the year which is equivalent to an infantile mortality rate of 125 per 1,000 births but the number of the latter is too small to be of any practical value from the point of view of infantile mortality.

There was a natural decrease of 2 in the population of the Burgh as shown by the excess of deaths over births during 1933.

MARKINCH BURGH.

Infectious Diseases.—Nineteen cases of infectious diseases were recorded during 1933 in Markinch Burgh. In 1932 the number of cases notified was 41 but 19 of these were chickenpox which ceased to be notifiable at the end of that year. The incidence of infection in 1933 was very similar to that of the previous year and the following cases were notified :—Scarlet Fever 15, Erysipelas 1, Acute Primary Pneumonia 1, Non-Pulmonary Tuberculosis 1 and Encephalitis Lethargica 1—Total 19.

Meat Inspection.—The public slaughterhouse is situated outwith the Burgh boundary but is the property of the Town Council. It is of good construction and is kept in a fairly satisfactory manner. The question

of meat inspection here is open to question as only a small proportion of the animals slaughtered are inspected. It has already been pointed out that the Sanitary Inspector cannot give the time necessary for this work.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 2,130. The corrected births for 1933 was 38 (Males 20, Females 18), which is equivalent to a birth rate of 17·8 per 1,000 estimated population. There were 2 illegitimate births or 5·2 per cent. of the total births. The marriages in 1933 numbered 19 and the marriage rate was 8·9 per 1,000 estimated population.

The deaths in the Burgh during 1933 numbered 17 (Males 9, Females 8), equivalent to a corrected and adjusted death rate of 7·9 per 1,000 estimated population. Only two of the deaths were attributed to infectious diseases as follows :—Cerebro-spinal Meningitis 1 and Pulmonary Tuberculosis 1. Two children under the age of one year died during 1933 and the cause of death in both was given as congenital debility and prematurity. The infantile mortality rate was 52·6 per 1,000 births—a very satisfactory figure. In 1932 the corresponding rate was 75.

The natural increase of population as shown by excess of births over deaths was 21.

BURNTISLAND BURGH.

Infectious Diseases.—During the year 117 cases of infectious diseases were recorded as follows :—Scarlet Fever 70, Diphtheria 14, Erysipelas 5, Ophthalmia Neonatorum 1, Acute Primary Pneumonia 8, Influenzal Pneumonia 4, Pulmonary Tuberculosis 5, Non-Pulmonary Tuberculosis 9 and Cerebro-spinal Meningitis 1. In 1932 there were 154 cases of infectious diseases recorded within the Burgh. There were 17 more cases of Scarlet Fever in 1933 than in 1932 and Diphtheria also showed an increase of 10 cases but although the incidence was considerably increased in both these diseases nothing in the nature of an epidemic occurred.

Milk and Dairies (*Scotland*) *Act* 1914.—There are two registered dairies within the Burgh with accommodation for 54 cows. Both dairies are clean and well kept.

Meat Inspection.—The public slaughterhouse is of good construction and kept scrupulously clean. A change was made during the year with regard to meat inspection and Mr. Waddell, Burgh Sanitary Inspector, was appointed detention officer in place of the District Sanitary Inspector who in view of his other duties had not time to carry out this work in a proper manner. The new arrangement is working very satisfactorily and I am satisfied that sufficient attention is now being paid to the work of meat inspection.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 5,437. The corrected number of births was 61 (Males 33, Females 28), and the birth rate was 11·2 per 1,000 estimated population. There was only one illegitimate birth during the year.

The marriages in 1933 numbered 26 and the marriage rate was 4·7 per 1,000. This is slightly higher than in 1932 when the rate was only 3·8 per 1,000.

There were 67 deaths (Males 34, Females 33), recorded in 1933 and the corrected and adjusted death rate was 12·3 per 1,000. The infantile mortailty rate was 49 per 1,000 births—a highly satisfactory figure. In 1932 the infantile mortality rate was 106 per 1,000 births.

During the year the deaths exceeded the births by 6, thus giving a natural decrease in the population by that figure.

KINGHORN BURGH.

Infectious Diseases.—During the year 37 cases of infectious diseases as follows were recorded :—Scarlet Fever 15, Diphtheria 3, Acute Primary Pneumonia 6, Influenzal Pneumonia 6, Pulmonary Tuberculosis 4, Non-Pulmonary Tuberculosis 3. There was a slight increase in the incidence of scarlet fever and diphtheria during the year but the other infections were fairly normal in this respect.

Milk and Dairies (Scotland) Act 1914.—There is one dairy within the Burgh registered for 10 cows and the premises are well kept and satisfactory for the purpose.

Meat Inspection.—There is a private slaughterhouse within the Burgh and reference has been made to this in previous reports. Representation was made to the Town Council with a view to having this abattoir abolished as thorough inspection of the animals slaughtered is difficult to carry out owing to the other duties of the detention officer. The Town Council, however, decided to renew the licence, pointing out that it was less objectionable to convey the meat from the present slaughterhouse than from Kirkcaldy or Burntisland.

During the year 101 cattle, 224 sheep and 26 pigs were slaughtered here and the weight in lbs. of meat condemned and destroyed was 494½ lbs.

Vital Events.—The population of the Burgh as estimated to the middle of 1933 by the Registrar-General is 1,923 an increase of 10 over the estimated figure for 1932. The corrected births is given as 24 (Males 14, Females 10) equivalent to a birth rate of 12·4 per 1,000 estimated population. There were no illegitimate births during 1933.

The deaths numbered 31 (Males 17, Females 14) equivalent to a corrected and adjusted death rate of 16·1 per 1,000 estimated population. Two children under the age of one year died in 1933 the infantile mortailty rate being 83·3 per 1,000 births.

The natural decrease of population as shown by excess of deaths over births was 7 during 1933.

LEVEN BURGH.

Infectious Diseases.—There were 99 cases of infectious diseases recorded in Leven Burgh during 1933. These were as follows :— Scarlet Fever 65, Diphtheria 6, Erysipelas 4, Puerperal Fever 1, Ophthalmia Neonatorum 6, Acute Primary Pneumonia 4, Influenzal Pneumonia 4, Pulmonary Tuberculosis 2, Non-Pulmonary Tuberculosis 6, and Encephalitis Lethargica 1—Total 99.

There was an increase of 23 cases of scarlet fever over the number notified as suffering from this disease in 1932 but at no time did the infection become epidemic in form. The incidence of infectious diseases was otherwise fairly normal for the burgh.

Milk and Dairies (*Scotland*) *Act* 1914.—There is one registered dairy within the Burgh and the premises are satisfactory for the purpose.

Meat Inspection.—The public slaughterhouse is somewhat old but on the whole it is satisfactory for the purpose of slaughtering animals. Reference to meat inspection and the animals slaughtered here has already been made in the report for the Landward Area.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 7,619. The corrected number of births was 121 (Males 68, Females 53) and the birth rate was 15·8 per 1,000 estimated population. There were 9 illegitimate births or 7·4 per cent. of the total births.

There were 45 marriages in 1933 and the marriage rate was 5·9 per 1,000. The deaths numbered 89 (Males 47, Females 42) and the corrected and adjusted death rate was 11·6 per 1,000.

Five children under the age of one year died and the infantile mortality rate was 41, a very satisfactory figure. In 1932 the infantile mortality rate was also low, being 44·6 per 1,000 births and these low rates recorded in succeeding years point to the satisfactory nature of the work being carried out by Health Visitors and Doctors in the Burgh in their care for the mothers and infants.

BUCKHAVEN BURGH.

Infectious Diseases.—During the year 347 cases of infectious diseases were recorded within the Burgh of Buckhaven and Methil. The number of cases of Scarlet Fever notified were exactly double that received in 1932 ; 236 cases occurred and the monthly distribution was as follows:— January 18, February 13, March 8, April 31, May 10, June 17, July 8, August 14, September 13, October 40, November 42, and December 22. Apart from the months of October and November the incidence of Scarlet Fever though above the normal did not assume epidemic

proportions. As in other Districts where Scarlet Fever was prevalent the number of pre-school children and adults formed approximately half of those contracting the disease and school closure was not resorted to as this was considered to be of no value from the point of view of prevention of spread of disease.

The cases of infectious diseases occurring within the Burgh in 1933 were as follows :—Scarlet Fever 236, Diphtheria 11, Erysipelas 19, Puerperal Fever 1, Ophthalmia Neonatorum 14, Acute Primary Pneumonia 22, Influenzal Pneumonia 5, Pulmonary Tuberculosis 17 and Non-Pulmonary Tuberculosis 22—Total 347.

Milk and Dairies (Scotland) Act 1914.—There are two dairies within the Burgh registered for 59 cows and both have been brought up to standard in terms of the County Dairy Byelaws.

Under the Milk (Special Designations) Order pasteurised milk is sold by Buckhaven Co-operative Society from two of their shops and by Methil Co-operative Society from six shops.

Meat Inspection.—The public slaughterhouse is of modern construction and is well adapted for the slaughter of animals ; the premises are always found to be kept in a thoroughly clean and satisfactory condition. Reference to meat inspection, the number of animals slaughtered and the weight in lbs. of meat condemned at this slaughterhouse will be found under the report for the Landward Area.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of the year was 18,032. The corrected number of births was 356 (Males 196, Females 160), equivalent to a birth rate of 19·7 per 1,000 estimated population.

There were 130 marriages during the year and the marriage rate was 7·2 per 1,000.

The deaths numbered 205 (Males 115, Females 90), equivalent to a corrected and adjusted death rate of 11·4 per 1,000. The death rate for all tuberculosis was 0·44 and that for pulmonary tuberculosis was also 0·44 per 1,000.

The infantile mortality rate for 1933 was 84 per 1,000 births ; in 1932 the rate was 101. Thirty children under the age of one year died during the year, the chief causes of death being congenital debility 16, whooping cough 4, pneumonia 3, bronchitis 2 and diarrhoea 4.

The natural increase in population in 1933 as shown by the excess of births over deaths was 151.

LOCHGELLY BURGH.

Infectious Diseases.—One hundred and twenty-two cases of infectious diseases were recorded within the Burgh in 1933. This is a decrease of 161 cases in the number notified in 1932 but in that year 144 cases of chickenpox were included whereas in 1933 chickenpox had ceased to

be a notifiable disease. There were 16 fewer cases of Scarlet Fever in 1933 than in 1932 despite the fact that the surrounding Landward Area was passing through a Scarlet Fever epidemic throughout the year. The inference to be drawn is that most of the inhabitants of Lochgelly Burgh were better protected either by a natural immunity or by having had Scarlet Fever at some previous date and so were able to resist fresh infection, as, at some time or other during the year, the majority must have been exposed to infection.

The cases of infectious diseases notified in Lochgelly Burgh in 1933 were as follows :—Scarlet Fever 38, Diphtheria 9, Erysipelas 16, Acute Primary Pneumonia 21, Influenzal Pneumonia 4, Pulmonary Tuberculosis 10, Non-Pulmonary Tuberculosis 23 and Encephalitis Lethargica 1—Total 122.

Milk and Dairies (Scotland) Act 1914.—There is one dairy within the Burgh registered for 24 cows and the premises are well kept and satisfactory in every way. In terms of the Milk (Special Designations) Order pasteurised milk is sold by Lochgelly Co-operative Society from four shops in the Burgh.

Meat Inspection.—The public slaughterhouse is of fairly good construction and I understand that certain improvements are contemplated here. Greater care with regard to general cleanliness of the premises and of the enclosure on which the building stands is needed however.

With regard to meat inspection reference to the animals slaughtered and the weight in lbs. of meat condemned will be found in the tabular statement in the general report.

Vital Events.—The population of the Burgh as estimated by the Registrar-General to the middle of 1933 was 9,334. The figure for corrected births was 178 (Males 86, Females 92) equivalent to a birth rate of 19·0 per 1000 estimated population. There were 13 illegitimate births or 7·3 per cent. of the total births. The marriages in 1933 numbered 64 and the marriage rate was 6·8 per 1,000 estimated population.

The deaths in 1933 numbered 111 (Males 55, Females 56) equivalent to a corrected and adjusted death rate of 11·8 per 1,000 estimated population. The death rate for all Tuberculosis was 0·32 per 1,000 and that for pulmonary tuberculosis was 0·21 per 1,000.

Four children under the age of one year died in 1933 and the infantile mortality rate was 22·4 per 1,000 births. This is a very satisfactory figure and beats the previous low record of 45·7 recorded in 1932. The continued low rate of infantile mortality indicates that the measures adopted within the Burgh for dealing with Maternity and Child Welfare are of a very satisfactory nature.

The natural increase of population as indicated by the excess of births over deaths was 67 during 1933.

Eastern Division.

G. MATTHEW FYFE, M.B., Ch.B., D.P.H.
Deputy Medical Officer of Health.

An outcome of the post-war depression, from which the country now appears to be showing signs of recovery, has been the subjection of social services to a closer financial scrutiny than ever before. Since the greater part of local rates are expended on the four main groups of public services—Education, Roads and Bridges, Public Assistance and Public Health—these have been keenly investigated and economies of greater or less magnitude have been effected.

Public Health organisations are possibly being more severely examined than any. Not only have Local Authorities considered them from the financial aspect but they are now the subject of enquiry by a Committee on Scottish Health Services.

Health cannot be secured by the dictates of finance and there is a danger that persistent economy cuts may lead to weakening of the whole structure of preventive medicine from which each member of the general public receives value greatly in excess of the amounts individually contributed, whether by taxes or by rates. Nevertheless there is reason to believe that in certain respects the Public Health services have fallen behind in the march of progress and are now in need of re-organisation, both in their relation to other services and in regard to their co-ordination and balance.

For instance, millions of pounds per annum are spent in the construction and upkeep of schools wherein children are taught the meaning of citizenship and are instructed in personal cleanliness and in the value of clean, healthy living : they return home, many of them to overcrowded and insanitary houses which have no internal water supplies and only primitive sanitary arrangements.

An enormous amount of money is spent on the maintenance of small local undertakings such as fever hospitals and water supplies, while the obvious economies which lie in schemes of centralisation are ignored or opposed.

Heavy expenditure is incurred in the control of infectious disease and in the treatment of those illnesses which come within the scope of Public Health authorities : yet little attempt is made to deal with those common ailments of the people which are the chief causes of incapacity and loss of working days. Further, when the state of physical fitness of the adult population, as displayed by the records taken under the National Health Insurance Scheme or the Army Recruiting Offices is examined, reasons emerge for doubt as to whether the financial commitments involved in the supervision of the health of the juvenile population are in keeping with the results obtained.

On the other hand, the Public Health services as presently organised re of comparatively recent origin. Barely forty years have elapsed ince first they were constituted and the success which has attended heir efforts in the control of infectious diseases, the improvement of he food supply and the eradication of injurious environmental in- uences merits high praise. As the years have passed, however, rapid dvances in biological knowledge and a national awakening to the undamental importance of health have led to increasing demands pon the resources of the organisation, without consideration of the dequacy of existing machinery or of its need for re-adjustment and xpansion.

Since, therefore, it would appear, that the future of public health ctivities lies in a much wider field of endeavour, wherein everything vhich relates to the well-being and usefulness of a citizen will pass nder review—whether physical or mental conditions, home conditions, onditions of employment or conditions of leisure—the time must come vhen all that pertains to the health of the people will be under national ontrol and when all organisations and agencies for the cure and for the revention of disease will be co-ordinated. Past experience has shown hat public schemes of centralisation do not necessarily entail a reduc- ion in running costs, and it is almost a truism that an increase in rates s the price which must be paid for increased civilisation. Nevertheless, onsiderable ultimate economies could be effected by centralisation f most of the forces which have been created to safeguard the nation's ealth, since this would involve the dissolution of many costly, redun- lant and isolated schemes which so frequently tend rather to secure he survival of the unfit than the preservation of the fit.

Such considerations as these are possibly of wider application than s the concern of the Local Committees whose work this section of the Report will describe.

The year was a very busy one and the ungrudging manner in which lembers gave of their time and experience in improving or in assisting thers to improve, conditions of living was a source of much gratifica- ion and encouragement. The following paragraphs will give an indica- ion of the work accomplished.

INFECTIOUS DISEASES.

The following number of cases of infectious diseases were notified :-

Disease.	St. Andrews District.	Anstruther District.	Cupar District.	Burghs.	Total.
Typhoid Fever ..	—	1	—	1	2
Paratyphoid Fever ..	—	—	—	1	1
Scarlet Fever ..	36	48	74	234	392
Diphtheria	2	1	8	10	21
Erysipelas	4	3	8	25	40
Puerperal Fever ..	1	—	1	—	2
OphthalmiaNeonatorum	—	—	4	4	8
Infantile Paralysis ..	—	—	2	1	3
Acute Primary Pneumonia	6	—	11	30	47
Acute Influenzal Pneumonia, ...	4	4	8	23	39
Cerebro-Spinal Fever	—	1	—	—	1
Puerperal Pyrexia ..	—	—	—	5	5
Pulmonary Tuberculosis	4	5	13	25	47
Non-pulmonary Tuberculosis	3	2	15	19	39
	60	65	144	378	647

In spite of the epidemic of Scarlet Fever which was prevalent throug out the country, the comparative incidence of the disease in the Ea of Fife was lower than was to be expected considering the fact th many years have passed since last an outbreak occurred and th therefore the majority of the juvenile population must be in a susce tible state. In the burghal and landward areas 392 cases were notifie The greatest number of cases occurred in Cupar District where the were 205. In St. Andrews and Anstruther Districts there were 90 a 97 cases respectively.

Except in the Burgh of Cupar in which 115 cases were notifi there were no indications of epidemic intensity in any part of the ar While in some few cases there was evidence of contact with the disea the majority of cases occurred sporadically and gave rise to no othe although often there were young persons in the same family.

Two factors had, probably, an influence on the comparatively l incidence of the disease : the first, that gross overcrowding is exc tional in the East of Fife and the second, that the nutritional a general physical state of the juvenile population was relatively good compared with that in the remainder of the County where the dise was rife. Further reference will be made to this matter in the sect dealing with hospital facilities.

In general the disease was of mild character. The incubation per d ranged from 48 hours to 5 days. The intensity of the rash var d considerably as did its duration. On the whole, however, the r h

vas mild and evanescent. This feature was much in evidence in Cupar Burgh where it led to difficulties since parents, having failed to witness the only sign which, to them, was characteristic of scarlet fever, did not seek medical advice and allowed children to return to school with discharging ears, throats and noses.

The majority of patients were not seriously ill and responded readily to nursing care. It was noticeable, however, that complications most frequently arose among children in whom the onset of the disease was particularly mild. Children who were sharply ill during the first day or two invariably made uninterrupted recoveries while children with very mild original symptoms often developed severe adenitis, otitis media or some such secondary complaint. Treatment with serum was not found to be of outstanding service in preventing these complications.

Nine deaths from scarlet fever occurred in the East of Fife—four of these were among patients admitted from the West of Fife. Two of the causes of death were of unusual type, viz.:—rupture of a branch of the carotid artery due to erosion from an inflamed cervical gland, sudden cardiac syncope in an adult patient apparently progressing favourably—possibly a coronary thrombosis. The other deaths were due to complications involving the kidneys, heart and lungs.

Active measures were taken to prevent, so far as was possible, the spread of the disease. With relatively few exceptions infected cases were isolated in hospital for at least four weeks. Among school children, contacts in the infant and junior departments were excluded from school whether they had had the disease or not: contacts in the senior departments were excluded if they had not had the disease. No reliance was placed on spraying of apartments with liquid disinfectants or in removal of infected articles for steam disinfection. Housewives were encouraged to air rooms and to use plenty of soap and water.

At schools many classes were examined for signs of the disease and suspected children were excluded. It was not found necessary, however, to close any school or class.

Although cases occurred not infrequently among dairy workers and in their families, the milk supply was not a cause of spread of the disease. Special precautions, however, were taken to ensure that no dairy worker who had been in contact with the disease resumed duty until a week after the infected person was removed to hospital.

None of the other notifiable infectious diseases assumed epidemic proportions in the East of Fife. Pneumonia, of which there was 86 cases—47 acute primary pneumonia and 39 acute influenzal pneumonia—was the next most common disease. A close third was tuberculosis with 84 cases—45 pulmonary tuberculosis and 39 non-pulmonary tuberculosis.

As regards other infectious diseases which are not notifiable clo contact was maintained with the schools, all the Head Teachers which have been instructed to notify the Public Health Department the first occurrence of cases in order that early steps might be tak towards prevention of spread. Under the arrangement informati was received regarding minor outbreaks of whooping cough, measl german measles and chickenpox in at least seven schools. In no instan did a serious situation arise. In some schools exclusion of first cas and contacts was followed by the occurrence of no further cases.

Mortality from infectious diseases was low—scarlet fever 5, dip theria 1, acute primary pneumonia 6, acute influenzal pneumonia cerebro-spinal fever 1, puerperal pyrexia 1, pulmonary tuberculosis non-pulmonary tuberculosis 1.

On the whole the year was a quiet one so far as infectious diseas are concerned. The scarlet fever epidemic although it gave rise anxiety regarding individual cases and was more prevalent in so places than in others, never really passed out of control or occasion necessity for extreme measures. So far as is known, too, neith scarlet fever nor any of the other infectious diseases caused permane disabilities to an extent more than is to be expected in the light modern medical knowledge.

Immunisation against Diphtheria.

It is a well known fact that while diphtheria is an endemic dise it is liable to intensified outbreaks from time to time, especially af long periods of dry weather when it takes toll particularly of you growing children who have not acquired immunity.

More than ten years have elapsed since last the disease was prevalt in the East of Fife, and according therefore to epidemiological pr abilities, an outbreak of diphtheria is now to be considered as overd In the lengthy period which has intervened comparatively few cas have occurred so that the greater part of the juvenile population is be regarded as being in a susceptible state and liable to contr infection. There is no purpose, therefore, in disguising the fact tlt an epidemic outbreak is likely to be disastrous. Accordingly all e more reason exists fror the Local Authority and for parents tak precautionary measures.

Advances in bacteriological knowledge have proved conclusivy that by three injections under the skin at weekly intervals of min doses of the toxins of the germs of diphtheria, it is possible to prev persons acquiring infection. The process is practically painless d in children is followed by no evil effects. Full immunity develops n most cases two or three months after the injections. Simple d reliable tests can be applied to establish whether or not the proc has been successful.

It is a matter for regret that for various reasons it has not been found possible to arrange for the immunisation of young people on a large scale. Apart from courses of immunising doses given by a few general practitioners to a small number of children, the City Fever Hospital at St. Andrews remains the only centre at which this work is carried out. Over two hundred children have been immunised there during the past seven years and although several of them have been in contact with the disease none have acquired it.

Not only is immunisation advisable as a prevention against sickness, disability and death but it is also advisable as a financially sound measure. As was explained in the Report for 1932, for instance, the cost of maintenance and treatment of a case of diphtheria in the City Hospital, St. Andrews, amounts to £12 17s 9d. It costs only 2s 5d to prevent a person acquiring the disease.

HOSPITAL ACCOMMODATION.

Infectious Diseases.

The following Tables describe the nature of the illnesses from which patients admitted to the four Infectious Diseases Hospitals were suffering and indicate the localities from which the patients came :—

Auchtermuchty Infectious Diseases Hospital.

	Scarlet. Fever.	Diphtheria.	Pneumonia.	Erysipelas.	Total.
Auchtermuchty ..	7	1	..	..	8
Cupar	77	..	2	1	80
Falkland	4	..	..	..	4
Ladybank ..	1	..	..	..	1
Newburgh ..	1	..	..	..	1
Landward County ..	40	3	1	..	44
West of Fife ..	79	..	1	..	80
Total ..	209	4	4	1	218

Ovenstone Infectious Diseases Hospital.

	Enteric.	Scarlet Fever.	Diphtheria.	Pneumonia.	Total.
Anstruther	..	8	1	..	9
Crail	1	14	..	..	15
Elie	..	12	1	..	13
Newburgh	..	1	..	..	1
Pittenweem	..	10	2	..	12
St. Andrews	..	..	..	1	1
St. Monance	..	6	1	..	7
Landward County ..	1	50	..	..	51
West of Fife	..	102	..	..	102
Total ..	2	203	5	1	211

St. Andrews Infectious Diseases Hospital.

	Scarlet Fever.	Diph-theria.	Primary Pneu-monia.	Influ-enzal Pneu-monia.	Measles.	Whoop-ing Cough.	Tuber-culosis.	Total.
Cupar ..	13	..	..	..	..	..	..	13
Pittenweem ..	..	..	..	1	..	..	..	1
St. Andrews ..	15	1	..	7	1	1	1	26
Landward County ..	10	..	3	1	..	1	..	15
West of Fife	54	..	..	..	..	..	..	54
Total ..	92	1	3	9	1	2	1	109

St. Michaels Infectious Diseases Hospital.

	Scarlet Fever.	Diph-theria.	Pneu monia.	Ery-sipelas.	Undulant Fever.	Total.
Anstruther ..	3	..	..	..	..	3
Cupar ..	29	1	..	..	..	30
Newport ..	20	..	3	..	1	24
St. Andrews ..	3	1	4	..	..	8
Tayport ..	16	1	..	..	..	17
Landward County	30	8	2	2	..	42
West of Fife ..	46	..	..	..	..	46
Total ..	147	11	9	2	1	170

The average duration of stay of patients in the four hospitals was a follows :—

Auchtermuchty, 35·0 days.
Ovenstone, 37·92 days.
St. Andrews, 29·31 days.
St. Michaels, 41·0 days.

There were 11 deaths, nine from complications arising from scarle fever and two from pneumonia.

Of the 708 patients admitted to the hospitals 282 came from th West of Fife where hospital accommodation was insufficient to mee the requirements of the scarlet fever epidemic. In all four hospital it was noticed that the nutritional and general physical state of th children admitted from the West of Fife, particularly those from minin communities, was below that of children admitted from the East c Fife. The degree of infection from which they suffered was no greate but many were less able to withstand the attack and more prone t the development of complications. All of them benefited greatly fro their stay in hospital. This fact, indeed, was a major consideratio in the formation of the policy of removing to hospital all cases of scarl fever for as long a period as possible since the nourishing diet whic the children received and the rest which they were compelled to tak

did much to counteract the injurious effects on health which definitely resulted from the industrial depression.

For the greater part of the year all the hospitals were overcrowded and all available beds and bed linen were utilised. In some instances overcrowding led to spread of complications throughout wards. Lack of sufficient accommodation for the observation of suspected cases proved a great handicap. Such an outcome of the epidemic conditions was to be expected since none of the hospitals are of satisfactory type. They are all too deficient in floor space and lacking in the essential adjuncts of modern hospitals.

It was fortunate that only one epidemic disease had to be dealt with. Had outbreaks of two infectious diseases run concurrently matters would have been very serious indeed. Arrangements, however, will require to continue as they are until a decision is reached regarding centralisation of hospital facilities for the East of Fife.

The Matrons and their staffs had a very trying year. Working under difficult conditions which taxed their strength severely, they showed the greatest possible devotion to duty. Many patients owed their return to health entirely to the self-sacrificing care of the nurses.

General Sickness.

There are no official arrangements for the hospital treatment of general sickness. The Infirmaries at Edinburgh, Dundee and Perth receive many patients from the County and it is likely that when reorganisation of the national hospital services takes place these centres will continue to be utilised since the steady improvement in transport facilities of recent years has provided further inducement towards the development of regional hospital schemes.

A very important part in the life of the community was played, however, by the Memorial Cottage Hospital, St. Andrews and the Adamson Cottage Hospital, Cupar. The first contains 34 general beds and 4 private maternity beds and the second 17 general beds. 615 patients were admitted to these hospitals and 27 deaths occurred. The average duration of stay of patients in the Memorial Cottage Hospital was 11·67 days and in the Adamson Cottage Hospital 19·87 days. 432 major surgical operations were performed and 531 persons made 2,612 attendances at the out-patient departments.

There is need for more extensive hospital accommodation for maternity cases in the East of Fife. Under present arrangements cases of difficult or dangerous labour are transferred to Dundee Royal Infirmary and cases of puerperal fever and pyrexia to Thornton Hospital. There are no facilities for cases of normal labour residing under unsatisfactory home conditions or for persons in good homes who should be relieved of household responsibilities at the time of confinement but who cannot afford the present cost of private wards. As

things are, there is no satisfactory accommodation at the Adamson Cottage Hospital and the wards at the Memorial Cottage Hospital, St. Andrews, are available only for those who can afford them. Since there is a definite modern tendency for women to seek the quietude and attention which only hospitals can give during the anxious period of child birth this aspect of the hospital problem will require serious consideration when reorganisation of the hospital services comes under review.

Ambulance Services.

An improvement took place in the efficiency of the ambulance service. Cameron Hospital having been provided with a new ambulance, the St. Michaels Hospital ambulance was restored to its proper quarter and did great service in removing patients from all parts of the eastern county. The ancient ambulance at Auchtermuchty Hospital was disposed of and a second-hand ambulance of good type took its place. The horse-drawn ambulance at St. Andrews, which is in quite good condition, continued to be used for removal of cases in the Burgh and vicinity. The Ovenstone Hospital horse-drawn ambulance would now be a source of interest in a museum but it is still occasionally called upon to convey patients from the immediate neighbourhood of the hospital. At the present juncture it would not be wise to incur expenditure in purchasing additional ambulances.

WATER SUPPLIES.

None realise more fully the important relationship which water supply bears to the life of a community than those who reside in small rural and urban areas, for the reason that the majority of them live under conditions either of chronic shortage or of intermittent scarcity according to the vagaries of the weather. In few parts of Scotland can the fact be better demonstrated than in the East of Fife, wherein the drought of 1933 served merely to accentuate conditions which have been recognised and proclaimed for years to be unsatisfactory.

This Report is concerned only with the landward part of the County so that no attempt will be made to describe the scarcity or the narrow margin of safety which exists in many burghal areas or to emphasise the constant anxiety, care and vigilance which their water supplies occasion.

The bulk of the rural population in the East of Fife still depends for water supply on wells, springs and burns—primitive sources of supply unprotected for the most part from contamination. Every drop of water has to be carried, often for a considerable distance, in fair weather and in foul. Children are educated in schools regarding the necessity for habits of cleanliness : they return home to houses where sinks water-closets and a sufficiency of hot water are unknown. Few realis

the discomfort and hardship suffered by rural households through lack of modern water-carriage sanitary fitments.

Some rural villages are more fortunate in having small storage reservoirs from which water is led by gravitation. In many of them, however, the amount of water stored is insufficient to permit of the development of the locality on modern lines. Particularly is this so in connection with housing conditions for the improvement of which there is so much need. In some places where houses have been built an increased strain has been thrown upon existing sources of supply and the time is bound to come, if it has not already arrived, when the building of additional new houses or the reconditioning of old houses will be held in check by a legitimate fear lest a definite water shortage be established.

There are other matters of importance in the landward part of the County which depend for their success upon an adequate water supply. The introduction of water supplies into cottar houses under the Housing (Rural Workers) Acts has been of importance not only from the point of view of sanitation but also from the point of view of the type of tenant attracted, since it is now generally admitted that a farm with modernised cot houses can command a superior type of worker. The dairying industry is affected also, since a pure and ample water supply is essential for the maintenance of the standard of cleanliness on which the safety of the milk supply depends and for the feeding of dairy herds which consume 8 to 10 gallons per head daily, especially in these days of individual drinking bowls. Other conditions being favourable, industries, even comparatively small concerns, cannot readily be attracted to communities where a copious and regular water supply is not available. Holiday resorts, especially inland resorts, which lack or are deficient in modern sanitary arrangements are sought only by the faithful few and claim the attention only of passing tourists, thereby being denied a share in the wealth which annually is expended by visitors in modern holiday centres. In short, the provision of an adequate water supply in small rural communities makes all the difference between reasonable prosperity and gradual decadence.

All these considerations are applicable to the East of Fife, which is to be regarded as being in a position of disadvantage so far as concerns its water supplies, perhaps as much because of scarcity of supply as because of the number of small water supply undertakings which exist.

The thirteen Burghs in the East of Fife have between them nine separate sources of supply. In the landward part there are no less than fifteen special water districts and at least eight private schemes.

During the year scarcity of water necessitated restriction of supply in the Special Water Districts at Pitlessie, Kingskettle and Newton of Falkland, Guardbridge, Lathones, Upper and Lower Largo, Largoward and Dunino.

No scarcity of supply occurred in the Special Water Districts at Strathmiglo, in spite of the fact that one of the collecting tanks was leaking, Balmblae, which draws its supply from the Falkland Burgh main, Dunshalt, where the Marl Pit contained plenty water, Elie, Earlsferry and St. Monance, where pumping from a bore saved the situation, and Leuchars, the well of which was not influenced by the deficient rainfall.

The Special Water Districts at Springfield and Cupar Muir exist only on paper. No water supply has been introduced although progress has been made towards that end.

In the Report for 1932 a brief resume was given of the surveys which were undertaken by the County Engineer on the instruction of the County Council, in an endeavour to find means of improving the situation in connection with water supplies. Investigations were continued during the year under review but no great progress can be reported.

An interesting experiment was undertaken by the employment of a water diviner of much repute to make investigation for suitable sources of supply for the villages of Guardbridge, Kingsbarns, Springfield, Cupar Muir and Largo. Two weeks in December were spent by him and the County Engineer examining the ground in the vicinity of these villages and the following results were obtained :—

Guardbridge Water.—Three underground streams were detected in the neighbourhood of Cuplahills Farm, Balmullo. The best of these sprung from a vertical on the high ground due west of Cuplahills and a site for a bore was selected over its course across the valley. It was estimated that the bore would require to be from 100 to 120 feet deep and that the necessary costs would amount to £150.

Kingsbarns Water.—Two underground streams were followed and were found to unite under a field above the station. A site for a bore was marked off, its elevation being 120 feet above the Manse roof. The necessary depth of the bore was considered to be from 120 to 140 feet and the estimated cost was about £135.

Springfield Water.—The best supply in this locality was detected to the east of Uthrogle Farm on the Cupar highway. There were two layers of water bearing rock, one at a depth of from 125 feet to 145 feet and the other at 180 feet to 190 feet. It was suggested that an eight-inch bore should be put down to a depth of 145 feet at an estimated cost of £170.

Cupar Muir Water.—An underground stream was located in the field on the west side of Drum Road and a site for a bore was selected. A six-inch bore 165 feet deep was recommended, the probable cost being £160.

Largo Water.—A very large supply of water was found to issue from Largo Law. A site for a bore was selected in a hollow on Balhousie Estate. The estimated depth of the bore was at least 165 feet and its cost about £220. Another strong supply was detected on Largo Estate not far from Pirwindy Smithy. Its depth was estimated at at least 160 feet and its cost at about £220.

The County Council decided that boring operations should take place at Uthrogle and at Cuplahills and that future procedure would depend upon the results obtained.

During the present year a bore was sunk, according to directions, at Uthrogle to a depth of 200 feet. A strong run of water was obtained at 138 feet and the water level stood at 69 feet from the surface. The yield, as tested by air lift pumping, was found to be 44,000 gallons per day. This amount is sufficient to supply the needs of both Springfield and Cupar Muir and to allow for increased demands resulting from the improvement of housing conditions. Work at Cuplahills is proceeding.

Action in connection with housing matters raised the question of the adequacy of the water supply at Pitlessie. The reservoir has a capacity of 50,000 gallons and at the height of the drought it was found that the total inflow per 24 hours was 2,160 gallons. Since the population of the Water District is in the neighbourhood of 328, the supply then available was equivalent to about $7\frac{1}{2}$ gallons per head per day. Insufficiency of water for a period of about five weeks is a usual occurrence at Pitlessie but during the remainder of the year the reservoir overflows and thousands of gallons ran to waste. It is a moot point, therefore, whether housing improvements should be held up because for about one month out of twelve there is a deficient water supply.

The above few paragraphs describe the nature of the major activities which took place in connection with water supplies in the East of Fife and it will be evident that while consideration was given to the improvement and formation of small schemes here and there, no progress was made towards the one solution which would overcome all difficulties—namely, the formation of a regional scheme for the whole county. It is an anomalous situation that there should be a deficiency of about two million gallons per day in the County generally and at the same time an unused surplus of nearly three millions daily in one particular part. It would also appear to be an unbusinesslike arrangement that there should be, in the East of Fife, more than thirty separate water supply undertakings including fifteen Special Water Districts, which, at the best, are makeshift devices of uneconomical nature.

If all the resources in the County were to be pooled there would be more than enough water for the immediate and future needs of every person in Fife at a cost much less than many localities are now paying. Few engineering difficulties stand in the way since it seems that all

that is required is an extension of an existing reservoir and the improvement and prolongation of the branch mains. The chief obstacle is the natural disinclination of many of those Local Authorities who have been at the cost of providing themselves with water supplies, however inadequate, to become associated with any scheme which may interfere with their right to supreme control of their own resources, and there is much to be said for such an attitude in view of experiences since the Local Government reform of 1929. It is to be hoped, however, that the time will soon come when all parties concerned will realise that there is great need for a round table conference in regard to the whole problem and that from the discussion a scheme of reorganisation will emerge in which all can participate with profit and without loss of prestige.

DRAINAGE.

All the adverse criticisms to which Special Water Districts are liable can be applied with equal justification to Special Drainage Districts. Special Districts in rural areas have such low rateable values that extensions and major works of repair are serious items for the communities concerned, so much so that not infrequently the sanitary officials find themselves reluctant to advocate schemes of improvement for fear of the effect on the local rates.

There are nine Special Drainage Districts in the East of Fife :— Newton of Falkland, Balmblae, Kingskettle, Freuchie, Leuchars, Newton Park (Wormit), Colinsburgh, Largo and St. Monance. In Newton of Falkland, Balmblae and Kingskettle, however, no drainage systems have yet been laid down. Arrangements in the other Districts met requirements reasonably well. A complaint was received regarding alleged offensive smells stated to be emanating from one of the sewer outfalls at Largo. Frequent inspections were made at the locus but no evidence of a nuisance was observed. It was found necessary during the year to arrange for an extension of the Water and Drainage Special Districts at Largo in order to provide facilities for the erection of a row of houses by private enterprise.

Many villages and hamlets suffer serious handicap from want of proper drainage facilities, e.g., Strathmiglo, Springfield, Dunshalt Cupar Muir, Ceres, Dairsie, Balmblae, Newton of Falkland, Kingskettle, Pitlessie, Boarhills, Kingsbarns, Largoward, Kilconquhar and Barnyards. Housing improvements in all these areas necessitate the building of cesspools and the disposal of effluent either by percolation into the ground or by discharge into neighbouring streams or road drains. Yearly the number of these cesspools is increasing with all the greater risk of contamination of wells and of the creation of nuisances.

Strathmiglo, for instance, is greatly in need of a drainage scheme Although arrangements were made at the end of the year for the

laying of a new sewer in the lower part of the village, the higher part is in a very bad state from want of suitable drainage. Garden grounds have become saturated with domestic refuse. Occasionally wash water can be seen running down the wynds between houses to find its way into street gullies leading to an old lade which runs through the village and which at the end of the year was in a silted up, overgrown, sewage contaminated state. Such houses as have modern internal sanitary fitments are drained through cesspools into old conduits which discharge into the lade. Matters will never be right until a public sewer is laid along High Street. Its cost, however, would be a very heavy burden on the community.

The road-side ditch at Strathkinness which received soil water from 25 houses was piped in during the year and no further complaints were made regarding offensive odours.

It is a matter for great regret that no results accrued from the work of the Water Supply and Drainage Schemes Sub-Committee who surveyed the County in 1931-32 and submitted a comprehensive report indicating the improvements that were necessary and an estimate of costs. Their recommendations were sound and reasonable and their proposals, if carried out, would have given a new lease of life to many villages which are sadly handicapped through lack of public water supply and drainage services. Had all their schemes throughout the County been carried into effect a contribution equivalent to a rate of only $2\frac{3}{4}$d per £ would have been required from the County Council. It is to be hoped that an opportunity may yet occur of turning to practical account the fund of information collected by the Committee.

REFUSE DISPOSAL.

There are eleven Special Scavenging Districts in the East of Fife :— Balmblae, Freuchie, Kingskettle, Newton of Falkland, Pitlessie, Springfield, Strathmiglo, Guardbridge, Leuchars, Largo and St. Monance. The District at Pitlessie, however, has never functioned as such.

There are many other villages which are in need of a properly-organised system of refuse disposal. At Dairsie, for instance, indiscriminate dumping of domestic refuse gave rise to cause for complaint during the year. Financial considerations, however, are the chief obstacles in the way of improved methods. It costs between £30 and £40 annually to provide for the collection and removal of domestic refuse in the average small village—a small sum yet one which would add considerably to local rates.

In many of the Special Scavenging Districts old quarries, cuttings and sand holes are used for the disposal of refuse. On the whole they are maintained in a reasonably good state although controlled dumping is not practised in several of them. Every endeavour is made to prevent

infestation with rats. Visits of inspection for this purpose are pai regularly by the Rat Enforcement Officer.

The refuse tip at Newton of Falkland is unsatisfactorily situated an is not fenced in. Arrangements have been made, however, for th transference of collected refuse to the Freuchie dump.

The Largo depot has been filled to overflowing. Faulty method have been employed in tipping and the lofty eminence which has bee formed will be difficult to disguise or to turn to a useful purpose. A the end of the year negotiations were proceeding for an extension c the site.

A new refuse tip was acquired at Strathburn for the use of Leuchai village. The site is a very suitable one well removed from habitatior and is excellently managed.

Several Burghs deposit their refuse on sites in the landward part c the County—Anstruther, Auchtermuchty, Crail, Cupar, Elie, Lady bank, Newport, St. Andrews. In the main they are well looked aft but greater attention to the proper requirements of controlled tippir would lend improvement. A few of the sites, too, have not been wisel chosen in view of their relation to dwelling-houses and water-supplie

The Cupar Burgh dump affords an example, possibly more strikir than others although improvement has been effected during recei years. It is situated close to and above the village of Cupar Mui Faces are too deep with resulting tendency to outbreaks of fire ar much unsightly debris is in evidence. Perhaps its most objectionab feature is its proximity to neighbouring houses. There is good reasc to believe, too, that the highly contaminated state of the water in tl quarry is leading to pollution of the wells from which the village dra its water supply. The introduction of a gravitation water supply Cupar Muir will obviate the latter objection and more shallow terrac and deeper layers of dressing would do much to prevent the former.

Although, as has been indicated, there are refuse dumps which invi criticism, it must be admitted that on the whole, steady improveme is taking place. Gross nuisances are not so much in evidence as th were and contractors are doing their best, sometimes under ve difficult conditions in view of the result of previous methods, to me the desires of the Sanitary Inspectors. Generally speaking, proprieto of land are not now so unwilling to lease suitable sites for purposes dumping.

HOUSING.

Building Bye-laws.

The following Table describes progress in connection with the ection and alteration of buildings :—

Plans Submitted.	Anstruther.	Cupar.	St. Andrews.	Total.
ouses to be erected under subsidy	0	26	8	34
ouses to be erected without subsidy	4	5	5	14
lterations and improvements of houses	14	9	20	43
rection of halls, garages, hutments, business premises, etc.	15	5	6	26
nprovement of Schools ..	1	1	1	3
nprovement of Dairies ..	2	4	3	9
lans Examined	35	25	23	83

Plans were considered for the erection of 34 houses under Governent subsidy. Five of these were in respect of housing schemes at upar Muir, Pitlessie, Kettle, Newton of Falkland and Dunshalt, all romoted under the Housing (Financial Provisions) (Scotland) Act, 924, and the Housing (Scotland) Act, 1930. One of them was in conection with a housing scheme at Guardbridge towards which the ounty Council contributed a loan under the Housing (Financial rovisions) (Scotland) Act, 1923. All the plans were approved.

Plans for the erection of 14 non-subsidy houses were considered. The umber is an increase on that of previous years, probably as a result f withdrawal of Government assistance towards the erection of houses y private enterprise. Two of the plans were for wood-built houses. ne in Cupar District received approval. The other in Anstruther istrict was not approved.

Plans for the alteration and improvement of 43 dwelling-houses were assed. The nature of the works entailed included the introduction f sanitary fitments, addition of extra rooms and other major works f reconstruction. Work in connection with two of the dwelling-houses as not proceeded with.

Proposals for the erection or reconditioning of 26 business premises, stitutions, garages, and hutments were favourably considered with ne exception, namely that of a wood-built ice cream and billiard aloon.

Considerable improvements were effected at three schools :—Luthrie, ew Gilston and Cameron.

The structural improvement of nine dairies received sanction.

Altogether 83 plans affecting 129 premises were considered by the hree local Committees concerned.

Housing (Inspection of District) Regulations (Scotland) 1928.

Surveys of housing conditions, particularly in the more populo areas formed an important part of the year's work and ample eviden was obtained that a considerable proportion of the population in t landward part of the eastern division of the County are residing insanitary houses. The large number of houses occupied by low-wa earners are specially liable to criticism. Many of them are owned l working class proprietors who are not in a position to afford the co of renovation and others by proprietors who have done little or nothi to check the deteriorations of age and usage. While it is likely that t County Council's building programme will ultimately lead to t replacement of a considerable number of these and while stea progress is being made in the reconditioning of houses under the Housi (Rural Workers) Acts, 1926-31, in many localities active steps towar the improvement of housing conditions are, as has been indicate under serious handicap through lack of water supply and draina facilities.

932 houses were inspected—Cupar District 537, St. Andrews Distr 225, Anstruther District 170.

528 houses were found to be in a state so dangerous or injurious health as to be unfit for human habitation—Cupar District 306, St Andrews District 156, Anstruther District 66.

Without recourse to official Notices under Section 20 (1) of t Housing (Scotland) Act, 1930, action was taken in connection with houses in which there was insufficient water-closet accommodatio In 62 cases owners complied with requirements : 9 cases were st pending at the end of the year.

Without recourse to official Notices under Section 40 (1) of t Housing, Town Planning, etc. (Scotland) Act, 1919, action was tak in connection with 69 houses which had not adequate water supp In 60 cases requirements were met by proprietors : 9 cases were st pending.

Sixty-seven Notices under Section 14 (1) of the Housing (Scotlan Act, 1930, were served—Cupar District 55, St. Andrews 9, Anstruth District 3. In response to some of these, work of renovation was hand at the end of the year. In several instances, however, Notic had become time-expired and no action had been taken towards co pliance with their terms. The County Council decided to make a t case of a particular house in Upper Largo and approved plans, prepar by the County Master of Works, for its renovation. In two instanc demolition orders were substituted for Notices under Section 14 at the request of proprietors.

Apart from such statutory action, however, much work was do towards the improvement of houses by methods of persuasion.

Anstruther District, for instance, the renovation of at least 40 cottages was undertaken as a result of approaches by the sanitary officials.

128 Notices were served under Section 16 (1) of the Housing (Scotland) Act, 1930. Six of these resulted in undertakings being accepted that the houses would not be used until they had been reconditioned and six of them in undertakings that demolition would follow departure of the present tenants. In 61 cases demolition orders were served. At the end of the year no houses had been demolished.

The character of the defects usually found to exist in unfit houses were—no damp-proof-courses ; no under-floor ventilation ; defective floors ; inner surfaces of external walls and surfaces of internal walls plastered on hard ; low ceiling heights ; lighting of apartments inadequate ; defective roofs ; defective or absence of rhones, conductors and rain-water-barrels ; defective chimney heads ; defective or absence of chimney cans ; defective fireplaces ; inadequate water supply ; supply not laid on to houses ; lack of drainage ; defective wash-houses ; defective dry-closets ; ashpits and pigstyes too close to dwelling-houses and these outbuildings are frequently in extreme dis-repair ; defective masonry—resulting from lack of repointing ; windows requiring repointing ; defective woodwork generally and lack of painting of same ; ground adjacent to houses frequently higher than floor levels ; and dampness.

Farm Servants' Cottages.

It is estimated that there are 1,898 farm servants' cottages in the East of Fife. No special survey of these was undertaken but periodically, as other work permitted, visits of inspection were paid to groups of them. During the past few years 737 cottages have been inspected, 596 were found to be in a defective state, 13 were demolished and 465 were renovated—424 with assistance under the Housing (Rural Workers) Acts, 1926-31 and 41 without such assistance. In 118 cases action is pending. In several cases the desired improvements are of minor nature. There remains, therefore, a total of 1,161 cottages which have yet to be inspected and dealt with. The depressed state of the farming industry has not lent encouragement to measures for the improvement of farm servants' cottages and the increasing mechanisation of agricultural work has led to the employment of fewer workers with the result that many rural cottages now stand empty or are tenanted by others than agricultural workers.

Housing (Rural Workers) Acts, 1926-31.

Forty-six plans for the reconditioning of 94 dwelling-houses were considered. Assistance under the County Scheme was granted in respect of 87 of these. Of the 7 plans which were not approved for purposes of grant, 4 were passed under the Building Bye-laws.

A considerable increase occurred in the number of houses renovated under the Act in Anstruther District. There was a decrease in Cupar

District and St. Andrews District continued to show comparatively low numbers. The figures for the year were :—Cupar District 5 cottages, Anstruther District 30 cottages, St. Andrews District 1 cottages.

Of all housing legislation the Housing (Rural Workers) Acts provid the greatest incentive towards the improvement of housing condition by virtue of the generous financial assistance which may be obtaine under their terms. Not only is a maximum grant of £100 available fo the renovation of a house occupied by a rural worker, or person of lik economic status, but loans can be obtained up to about 80 per cent. c the total cost incurred. Not infrequently it is stated that the grant c £100 has to be repaid, or vaguely, that it places a proprietor under som obligation to the Local Authority. This opportunity is taken of co tradicting such erroneous impressions and of making it clear that th grant is a gift conditional only upon the improvements complying wit modern standards and with the tenants of the property being of th class defined in the Acts.

The Acts will remain in force until October 1936, but there a already clear indications that their repeal is contemplated. There therefore all the more reason for proprietors to seize the opportuniti presented at an early date. As has been previously stated, no syst matic survey of farm workers cottages has yet been undertaken b the time is coming when this work will be done and many proprieto will be called upon, under statutory Notice, to put their properties in a habitable state. It would be unfortunate if proprietors then four that no grant or at least a diminished grant was available towards th costs entailed.

The nature of the works ordinarily called for under the Coun Scheme for Assistance comprise—introduction of water carria sanitary fitments, removal of causes of dampness, improvement lighting and ventilation of rooms and the provision of facilities f washing and drying clothes and of adequate press and storage acco modation.

Some 900 houses have now been reconditioned under the Acts in t County as a whole but as many more of similar type still remain to improved. Even allowing for those who may have serious financ difficulties, it is hard to understand why more proprietors do not subm applications under the County Scheme. Not only is the time passi when grant, at the present rate, will be available but, so far as hou in agricultural areas are concerned, it is now generally accepted th modernised cottar houses command a superior type of worker.

Present Conditions and Future Requirements of Housing.

Throughout the year investigations were made of housing conditi in many villages and other populous areas in the East of Fife. F

eports were submitted to the Local Committees concerned and in most nstances visits of inspection were paid by the Members to all properties lescribed as insanitary. The arrangement was a most helpful one ince it led to full appreciation of the circumstances of each property nd to uniform and equable decisions.

The following Table describes the state of matters in the areas nentioned, for some of which, however, full details are not available :—

Locality.	Insanitary Houses. For Demolition.	Insanitary Houses. For Repair.	Overcrowded Houses.	Sub-let Houses.	Demand for Houses. Marriage, etc.
CUPAR DISTRICT.					
Dunshalt ..	4	8	1	2	6
Strathmiglo ..	24	32	7	4	10
Newton of Falkland ..	1	4	0	2	7
Kingskettle ..	2	2	1	2	9
Pitlessie ..	9	12	8	0	0
Springfield ..	18	26	7	1	0
Cupar Muir ..	6	7	0	3	7
Ceres	161	?	?	?	0
Craigrothie ..	8	?	?	?	0
Dairsie ..	7	?	?	?	2
Freuchie ..	20	37	6	4	7
Gateside ..	3	?	?	?	0
Letham ..	?	?	?	?	0
Luthrie ..	5	?	?	?	0
	123	128	30	18	48
ST. ANDREWS DISTRICT.					
Guardbridge ..	0	2	13	3	21
Leuchars ..	16	7	0	4	15
Strathkinness ..	14	13	1	1	4
Denhead ..	6	2	1	0	0
Kincaple ..	4	13	1	0	0
Kingsbarns ..	6	10	6	0	4
Boarhills ..	6	8	3	0	0
Balmullo ..	1	15	7	2	1
Radernie ..	?	?	?	?	0
Lathones ..	0	6	0	0	0
Dunino ..	?	?	?	?	0
Peat Inn ..	?	?	?	?	0
	53	76	32	10	45
ANSTRUTHER DISTRICT.					
Kilconquhar ..	22	24	2	0	3
Arncroach ..	17	11	2	0	1
Colinsburgh ..	15	14	2	0	3
Largo-Lundin-Links	16	20	2	?	4
Largoward ..	13	22	6	0	0
	83	91	14	?	11

In the following paragraphs the information submitted in the above Table is discussed.

Number of Insanitary Houses.—The figures submitted for the three Districts are exclusive of houses which have been closed pending demolition or other action, which have been renovated after statutory procedure, or which are the subjects of life rent undertakings. They therefore represent the number of occupied houses which are irremediably unfit for habitation or which could be renovated, viz :—

	Houses which should be demolished.	Houses which should be reconditioned.
Cupar District	123	128
St. Andrews District . .	53	76
Anstruther District . .	83	91
Total . .	259	295

Overcrowded Houses.—The amount of overcrowding is relatively small as compared with conditions in industrial areas and from the health point of view is to some extent compensated for by lack of congestion of buildings. On the other hand there is definite evidence of unavoidable mixing of sexes, particularly among growing families. The known cases of overcrowding are as follows :—

Cupar District	30
St. Andrews District . .	32
Anstruther District . .	14
Total . .	76

These families reside either in good houses or in houses which could be renovated at reasonable cost. Their numbers in individual villages are small and do not lend encouragement to proposals for the formation of Improvement Areas. For instance, the number of excess units which would be liberated for grant earning purposes in the following villages would be only :—

Guardbridge	24
Balmullo	2
Pitlessie	14
Springfield	18
Freuchie	10

It is not considered that Improvement Area Schemes would supply a satisfactory remedy for the housing problem generally in the East of Fife. From the financial point of view they are hardly worth while, from the practical point of view they entail restrictions which would be hard to enforce.

Sub-let Houses.—Sub-letting is not a marked feature of housing conditions. In a few villages, however, which are places of resort, a considerable amount of seasonal sub-letting occurs. For instance, in Largo, Lundin Links, Colinsburgh and Kilconquhar many houses

are sub-let during the summer months. Such circumstances are not within the scope of present considerations, however. Without a house to house visitation throughout the East of Fife it is not possible to present accurate figures for the amount of sub-letting, but so far as is known the number of sub-let houses is as follows :—

Cupar District . .	. .	18
St. Andrews District	. .	10
Anstruther District	. .	?
Total	. .	28

Demand for Houses.—The information submitted under this heading has been collected from District Clerks, Sanitary Inspectors, Registrars and from the Housing Factor. No account has been taken of persons residing in unfit houses since the conditions under which they live render them eligible for new houses. Only persons desiring better accommodation, desiring to get married or residing in apartments have been taken into consideration. No allowance has been made for persons desiring houses but residing in other areas than the village specified.

The number of persons desiring houses in order that they may get married appears to be remarkably small. The Housing Factor received only three such applications, viz :—Dunshalt 1, Newton of Falkland 1, Leuchars 1. In other parts of the landward area, however, than those dealt with there is a slight demand for houses for marriage purposes. For instance, in the Parish of Carnbee there are at least three couples awaiting houses in order to get married. The situation in other Parishes is doubtless similar but numbers are scattered over such a wide area that any project to erect new houses solely to meet this need is hardly worthy of consideration.

The demand for houses is better considered as a whole and so far as can be ascertained the following figures represent the situation :—

Cupar District . .	. .	48
St. Andrews District	. .	45
Anstruther District	. .	11
Total	. .	104

Housing Requirements.—Since care has been taken not to include under the headings discussed above any family more than once, a sufficiently accurate indication of the housing requirements of the more populous parts of East and West Fife will be gained by totalling the figures submitted under the headings :—Houses for Demolition, Overcrowded Houses, Sub-let Houses and Demand for Houses, viz :—

Cupar District . .	. .	219
St. Andrews District	. .	140
Anstruther District	. .	108
Total	. .	467

This figure is not to be regarded as indicating total housing requirements since, as has been said, information is incomplete regarding a few villages and no cognisance has been taken of outlying sparsely populated areas or of persons desiring a change of locality for purposes of employment.

Housing Programme.—To meet this need the County Council have completed or are in course of completing the erection of the following number of houses :—

Strathmiglo	12
Newton of Falkland ..	4
Pitlessie	8
Dunshalt	4
Cupar Muir	4
Kingskettle	6
Leuchars	12
Total ..	50

In addition a grant of £100 per house was given to Guardbridge Paper Co. towards the erection of 8 houses at Guardbridge.

At the end of the year very few of these houses had become occupied but even when all are occupied by families from unsatisfactory houses, there will still remain much need for the building of more houses since the deficiency outstanding in the three Districts will be :—

Cupar District	181
St. Andrews District ..	120
Anstruther District ..	108
Total ..	409

Insufficient justification exists, however, for the erection of 409 houses in the particular areas specified for the reason that many insanitary houses are occupied by old folk and several by single adults for the County Council do not require to provide houses. For instance, operations under Section 16 of the Housing (Scotland) Act, 1930, commenced in 1933 have so far resulted in life rents being allowed in 25·8 per cent. of cases and in about 8 per cent. of condemned houses being renovated by proprietors. It must be borne in mind also that several of the villages mentioned have become decadent as a result of the failure long since of local industries.

An estimate of the immediate housing needs of the areas named would therefore require to be modified in the light of such facts. Accordingly, it is submitted that housing requirements in the East of Fife would be sufficiently met during the next few years by the erection of 110 houses in Cupar District, 80 houses in St. Andrews District and 70 houses in Anstruther District.

Any computation of the housing needs of the East of Fife, however, is open to criticism on the grounds that in many villages facilities for water supply and drainage are totally inadequate.

FACTORIES AND WORKSHOPS.

Visits of inspection were periodically paid to the factories and workshops in the landward part of the East of Fife. The following number of inspections were made—factories 37, workshops 235, workplaces 3. 41 written notices were served requiring remedy of defects. 24 nuisances under the Public Health Acts were discovered. These were related to want of cleanliness, want of ventilation, want of drainage of floors and such defects as unsatisfactory sanitary accommodation. In all cases the causes for complaint were remedied.

As years pass, conditions under which people work get better and better. Indeed, many persons live under more healthy conditions during their working hours than they do at home.

MEAT SUPPLY.

There are 22 slaughterhouses in the East of Fife, viz :—

Cupar District—1 Public Slaughterhouse in Cupar Burgh and 13 Private Slaughterhouses elsewhere.

St. Andrews District—1 Public Slaughterhouse in St. Andrews Burgh and 3 Private Slaughterhouses elsewhere.

Anstruther District—1 Public Slaughterhouse in Anstruther Burgh and 3 Private Slaughterhouses elsewhere.

Meat inspection is in the hands of the Sanitary Inspectors of each area who have all been appointed Detention Officers and who have been empowered to call in Veterinary Inspectors in cases of difficulty or doubt. In most instances their verdicts are accepted by owners of carcases without recourse to professional opinion. To facilitate their work, by arrangement with the Town Councils of Small Burghs and with butchers, hours for slaughtering have been defined for each slaughterhouse.

So far as it goes the system has worked reasonably well but it cannot be claimed that it attains to that degree of efficiency which should characterise such an important Public Service. It is quite impossible for the Sanitary Inspectors with duties so numerous and on occasion urgent, to maintain such supervision that they can guarantee that unsound meat does not occasionally reach the public, although it can confidently be asserted that the greatest vigilance possible under the circumstances is maintained.

The situation in Cupar District is particularly difficult in view of the large number of slaughterhouses which are scattered throughout a wide area. The smaller number of slaughterhouses in St. Andrews

and Anstruther Districts render arrangements for meat inspection more adequate and practicable although, of course, Sanitary Inspectors cannot spend all their day in attendance at slaughterhouses.

At the Public Slaughterhouse at St. Andrews alone, a proper system of meat inspection is in force. There, a Veterinary Inspector has been appointed by the County Council to inspect all carcases before they leave the premises.

Reorganisation of the present system of meat inspection will not be easy of accomplishment for the reason that effective measures entail centralisation of slaughtering and abolition of private slaughterhouses. In this respect the Local Government (Scotland) Act, 1929 would appear to have created difficulties in that licensing of slaughterhouses in small burghs is under the control of Town Councils while meat inspection in them is a function of the County Council. It might well be, therefore, that since there are 9 private slaughterhouses in small burghs in the East of Fife, uniformity of action in the withholding of licences could not be attained, although it is to be hoped that, if the position were made sufficiently clear, Town Councils would agree to co-operate with the County Council for the good of the community as a whole.

Closure of private slaughterhouses would necessitate concentration of slaughtering in public slaughterhouses. So far as St. Andrews and Anstruther Districts are concerned little difficulty lies in the way of this measure. Slaughtering could be centralised in the public slaughterhouses at Dundee, St. Andrews, Anstruther and Leven. A similar arrangement in Cupar District could not be so easily effected for the reason that the existing public slaughterhouse in the Burgh of Cupar is out-of-date and quite unsuitable in size and structure to permit of the meat supply being dealt with on modern lines. A new public slaughterhouse would therefore require to be built in some central position, preferably in association with a cattle market.

If such a scheme were evolved, the arrangements for meat inspection would be simplified and rendered much more satisfactory by the appointment of a Veterinary Surgeon as Meat Inspector to each Public Slaughterhouse in the County as is now the case in St. Andrews.

It is conceivable that such a reorganisation would inflict a certain amount of hardship on some butchers but the public have a right to demand that their meat supply be guaranteed to be safe. At present no such guarantee can be given.

An alternative arrangement might be made but it would not result in a like degree of security. Qualified Meat Inspectors might be appointed and steps taken to ensure that no carcases leave the slaughterhouses except with the permission and under the seal of the Inspector. The number of slaughterhouses in Cupar District would render such an appointment almost a whole-time one for that area.

On the other hand the number of slaughterhouses in St. Andrews and Anstruther Districts is insufficient to provide for the appointment of a whole-time official so that a reasonable, although not entirely satisfactory solution might be to restrict hours for slaughtering to specified periods which would enable the Sanitary Inspectors to make arrangements for the inspection of all carcases before removal.

Visits of inspection were paid regularly to all the slaughterhouses in the landward area where regard was had for structural conditions, state of cleanliness and methods employed. Only a few of the premises are in a satisfactory structural state. In most, lairages open direct off slaughtering booths. There are no cooling chambers. Slaughtering booths are too small and are often used for the storage of meat, hides and offal. Frequently, it is difficult for a butcher, in dressing a carcase, to avoid besplattering another hanging nearby. In spite of these difficulties, however, a remarkable degree of cleanliness was maintained by the butchers and their methods on the whole gave no grounds for criticism. For the slaughter of cattle and sheep the captive bolt pistol is in general use.

No new slaughterhouses were licensed during the year and all previous licenses were renewed.

The following Table shows the number of animals slaughtered and the weight, in pounds, of meat condemned and destroyed as unfit for human consumption :—

Slaughterhouses.	Cattle.	Sheep.	Pigs.	Total.	Lbs. of Meat condemned.
Cupar District.					
Public	714	1,728	621	3,063	3,838
Private	1,015	31,942	424	33,381	3,101
St. Andrews District.					
Public	1,168	4,544	427	6,139	17,858
Private	282	553	61	896	577
Anstruther District.					
Public	761	1,745	232	2,738	8,289
Private	389	1,368	230	1,987	1,502
Total ..	4,329	41,880	1,995	48,204	35,165

An interesting side light is thrown upon the arrangements for meat inspection by analysis of the above Table on the basis of the amount of meat condemned per head of cattle slaughtered, viz :—

St. Andrews Public Slaughterhouse	14 lbs.
Anstruther Public Slaughterhouse	10 lbs.
Cupar Public Slaughterhouse	4½ lbs.
All Private Slaughterhouses	2 lbs.

Since the class of animal slaughtered in each slaughterhouse averages out during the course of a year, in spite of frequent claims to the contrary, it is clear that meat inspection is much more strict when undertaken by a Veterinary Inspector in a Public Slaughterhouse. Considering the known excessive liability of cattle to disease, there is cause for remark regarding the amount of meat condemned in private slaughterhouses which amounted to only 2 lbs. per head of cattle slaughtered, especially since the equivalent average figure for the whole of Fife is 6 lbs.

Particular attention was paid to the enforcement of the several Acts and Regulations regulating the safety of the food supply and frequent inspections were made to ensure that no person was keeping or storing " in any premises that are not kept in a clean and sanitary condition, any meat or meat food product intended for sale for human consumption."

MILK SUPPLY.

Two events which are likely to have a great influence on the milk supply occurred during the year. The first was the approval by the County Council of a Scheme of Accredited Clean Milk Producers and the second was the commencement of the operations of the Scottish Milk Marketing Board.

The principal objects of the *Scheme of Accredited Clean Milk Producers*—the first of its kind in Scotland—is to stimulate the interest of dairymen in the production of a pure milk supply and to secure recognition and publicity for producers who are consistently supplying milk of good hygienic quality. Briefly, its conditions are that samples sent by the dairymen and surprise samples taken by those administering the Scheme must consistently comply with the following standards :—

Butter-fat content not less than 3·0 per cent.
Bacterial count not greater than 250,000 organisms per c.c.
Coliform organisms absent from 1/100 c.c.

The failure of three consecutive samples to attain these standards precludes a producer from further participation in the Scheme.

Before a producer's name can be placed on the Roll of Accredited Clean Milk Producers a probationary period is allowed during which trial samples are taken and advice is offered in methods of clean milk production. Needless to say, producers of Graded Milk are automatically admitted to the Roll and given the accompanying Certificate.

The County Council has identified itself with the Edinburgh and East of Scotland College of Agriculture in promoting the Scheme, which is a voluntary one wholly directed by Officials of the College in consultation with the County Public Health Department.

The scheme does not go so far as it might and it is not a difficult matter for any dairymen to produce milk which attains to the standards of cleanliness and butter-fat content defined. The public should therefore know that any producer who has failed to qualify for a Certificate is selling milk of unsatisfactory type.

It is earnestly hoped that milk producers will realise the importance of the Scheme not only from the point of view of consumers but also from the point of view of their own interests since it aims at a much needed general improvement in the quality of the milk supply and will avowedly give publicity to those dairymen who are known consistently to produce clean milk.

It is early yet to appraise accurately the effect of the work of the *Scottish Milk Marketing Board* upon the milk supply. So far, however, there are indications that it has had adverse influence on the sale of Graded Milk since producers who were obliged to raise their prices lost many of their customers and had to resort to selling milk of lower grades. For instance, one producer of Certified Milk found it necessary to change the designation of his milk to Grade A (Tuberculin Tested) Milk and another was obliged to sell Grade A milk as ordinary milk. After all the efforts both official and unofficial that have been made during recent years to educate the public regarding the need for an increased consumption of Graded Milk, the immediate result of the activities of the Milk Marketing Board was most distressing.

On the other hand it would appear that the levies demanded of producers may be more than some small dairy farmers can bear. One cannot view with equanimity the closure of any business, but unless a radical change for the better in methods of milk production occurs in many small dairy farms, it is possible that the Local Authority itself may be compelled to take steps towards their closure.

A satisfactory feature of the Board's Scheme is their requirement that ordinary milk must have a butter-fat content of 3·4 per cent. for the months of February to July and 3·5 per cent. for the months August to January. These standards are higher than that required under the enactments administered by the Local Authority. Distributors to whom bulk supplies are sent are also demanding certain standards of purity.

In the Annual Report for the current year it may be possible to make a more definite pronouncement regarding the result of the Boards' activities. In the meantime the position is being carefully watched.

There are 151 registered dairy farms in the Landward Area and 34 in the Burghal Area, a total of 185 dairy farms. In addition there are 43 registered dairy shops and milk stores. The number of cows in the registered dairy farms totalled 2,760.

The letters which were sent to dairy farmers in Anstruther and St. Andrews Districts following upon the survey which was made of dairy premises in 1932 were followed by good results. Improvements of very satisfactory nature were undertaken in many dairy farms.

There still remain several dairy farms in the East of Fife in which no improvement has taken place although, as a result of the frequent visits of the Sanitary Inspectors, the standard of cleanliness has been raised generally. Some of these are so situated or are so defective in structure that they can never be brought into line with requirements. They ought to be closed.

On the other hand enlightened public opinion and resulting restriction in purchases is gradually bringing about the disappearance of the old, dark, smelly byre. Two such fell by the way during the year. Clean, well lighted, airy cowsheds present to those members of the public who look for such things, an appeal which reacts in increased custom.

Four dairy farms changed hands during the year. Three farms were reconditioned into dairy premises and alterations and improvements were effected in four other dairy farms.

The County Veterinary Inspector, so far as circumstances allowed, inspected all dairy cattle twice during the year, taking such action as was deemed necessary when diseased animals were encountered. The work of a veterinary inspector is of first importance as regards the safety of the milk supply. A careful investigation of the farm milk coming into the four principal cities of Scotland showed that 10 per cent. was infected with the germs of tuberculosis and it has been estimated that in these cities 5·26 per cent. of the milk sold at retail is infected. It is the duty of the veterinary inspector to protect the public from infection with bovine tuberculosis. He should therefore have opportunities of making more frequent inspections and of dealing with manifestations of disease in animals at an earlier stage than is now the case. On this account it is difficult to understand the hesitation of the Government in introducing really effective measures to deal with the prevalence of tuberculosis among dairy herds.

An increase occurred in the number of dairy premises registered under the Milk (Special Designations) Order (Scotland) 1930, two dairy farms having been licensed to sell Grade A milk and one dairy shop to sell pasteurised milk. The total number of premises selling milk under special designations is as follows :—

Producers.	*Premises.*	*Grade of Milk.*
Lord Cochrane of Cults.	Hospital Mill, Springfield.	Certified.
Wm. Lohoar.	Wester Balrymonth, St. Andrews.	Certified.
Mrs. Younger.	Mount Melville, St. Andrews.	Certified.
Jas. Clement.	Kilrenny Mill, Anstruther.	Grade A.
Messrs. J. & A. Anderson.	Monturpie, Largo.	Grade A.
J. Black.	Grangehill, Elie.	Grade A.
Mrs. Brunton.	Grange, Elie.	Grade A.
R. Telford.	Lathallan Home Farm, Kilconquhar.	Grade A.
Thos. Jardine.	Balmakin, Colinsburgh.	Grade A.

Retailers.		
John Robertson.	The Barony, Cupar.	Certified.
Jas. Martin.	Woodburn Dairy, St. Andrews	Certified.
E. Dobie.	Elie & Earlsferry Dairy Co., Elie.	Certified.
S. S. Melville.	55 High Street, Elie.	Certified.
Miss Allison.	1 Rankeillor Street, Elie.	Grade A.
Co-operative Society.	Guardbridge.	Pasteurised.

All these premises were regularly inspected during the year and samples of milk were taken for chemical and bacteriological analyses. In every case the specimens were consistently found to comply with the requirements of the Order. The Veterinary Inspector made periodic clinical examination of all the herds and subjected the animals of the three Certified herds to the tuberculin test. The few reactors which were found were removed.

The East of Fife is fortunate in the amount of graded milk produced locally and there are indications that more milk of this type will become available. It is likely, for instance, that Kilrenny Mill Dairy Farm will be licensed during the present year to sell Grade A (T.T.) Milk. It is expected that the Scheme of Accredited Milk Producers will encourage more dairy farmers to seek licences to sell Graded Milk and it is to be hoped that the activities of the Milk Marketing Board will have no lasting effect upon the sale of this superior type of milk.

The County Public Health Committee, in order to lend encouragement to the production of graded milk, authorised during the year a reduction in the amount of licence fees as under :—

Certified Milk	Producer		10/6d.
	Retailer		5/-.
Grade A (T.T.) Milk	Producer		10/6d.
and Grade A Milk ..	Retailer		5/-.
Bottling Establishment ..		£2	2/-.
Pasteurised Milk	Pasteurising Establishment	£1	1/-.
	Retailer		5/-.

It would be a further inducement if they could see their way to reduce the charges incurred in the tuberculin testing of herds.

Reference to the production of Graded Milk would not be complete without mention of a new venture in Scottish dairying instituted on Cults Farms, Springfield. An open-air milking unit which practically takes the form of a moveable byre, has been formed. It comprises six stalls into which the cows walk from a kraal into which they are collected before milking. The cows are milked by machine and while being milked receive a measured ration of concentrated food to compensate for the quantity of milk given in excess of one gallon. At the conclusion of milking, a door in front of the cow is raised and the animals walks into the open field.

Throughout the year and in all weathers the cows remain in the open air. Their health has been remarkable. In the spring their condition was found to be superior to that of the indoor herd. So

successful has the venture been from this point of view and from the point of view of milk production that there seems to be little doubt but that the system has come to stay.

An important point regarding the arrangement in its relation to the production of Certified Milk is that it obviates many of the sources of contamination to which milking in byres is liable, especially since the entire unit is moved from place to place in the pasturage.

OFFENSIVE TRADES.

The premises at Damside, Cupar Muir, where slaughtering of horses, blood and bone boiling, tallow melting and the manufacture of fish and bone meal is carried out, was kept under supervision during the year. In July and in October complaints were received regarding pollution of the atmosphere with offensive odours. Frequent and prolonged investigations were made. The slaughter hall, the dead meat hall, the digestors and the fume chamber presented no objectionable features or grounds for criticism. The only definite finding was a concentration of objectionable odours in the proximity of the chlorinating tanks. Dr. Wylam of the Department of Health was eventually called in and he made the suggestion that perhaps the bleaching powder used in the tanks had become inert. Tests were accordingly made and it was found that the powder was almost entirely spent, the available chlorine being only 1·55 per cent. as against a normal of about 35 per cent. Inspection of the stock barrels showed that the powder had absorbed a large quantity of water mainly as a result of unsatisfactory storage conditions.

The firm was instructed to make arrangements for a regular supply of bleaching powder in small quantities for storage in a dry place. A subsequent examination of the available chlorine content of powder and of the fluid in the tank gave much more satisfactory results since when no further complaints were received.

The bone meal and manure manufacturing business at Cupar occasioned no cause for enquiry.

No cause for action arose in connection with the methods employed for the preparation of meat as food for hounds at the Kennels, Ceres.

ACCOMMODATION OF SEASONAL WORKERS.

Only seven premises in the East of Fife are known to accommodate seasonal workers. Arrangements in most of them are in accordance with requirements but in one or two improvements could be effected. On the whole, however, conditions are considerably better than they were some years ago.

It would appear that farmers are becoming less inclined to employ resident labour from a distance and tend more and more to draw upon

ay workers hired from neighbouring populous places. Improved ransport facilities are having an influence towards the change. Where easonal workers are given living quarters numbers are small.

A further exchange of correspondence took place regarding the roposed new Bye-laws but no definite agreement was reached and the ye-laws are still in abeyance.

PUBLIC HEALTH SERVICES IN BURGHS.

The following is a brief account of public health activities in burghs so far as they are the concern of the County Council by virtue of heir powers under the Local Government (Scotland) Act, 1929. The umber of burghs was added to during the year by the formation of he Burgh of Barony at St. Monance into a Police Burgh. The County [edical] Officers are responsible for non-transferred services to the own Councils of the following Burghs :—Auchtermuchty, Anstruther-ilrenny, Crail, Elie and Earlsferry, Pittenweem, St. Andrews, St. onance and Newport, the last as a result of the retiral during the ear of Dr. Stewart, Medical Officer of Health. Special detailed reports ave already been sent to each of these Town Councils.

UNITED BURGH OF ANSTRUTHER-KILRENNY.

The population as estimated to the middle of the year was 3,342. he birth rate was 14·7 per 1,000 of population and the death rate ·4 per 1,000 of population. There had been more births and fewer aths during the year. Two deaths occurred among infants under ne year of age representing an infantile mortality rate of 40·8 per 1,000 rths. The principal cause of death was diseases of the heart and teries. Eighty-two per cent. of the total number of deaths occurred nong people of 55 years of age and over. That the majority of habitants die at a ripe old age is a satisfactory reflection on the vironmental conditions of the town which, during recent years, ve steadily improved.

In spite of the prevalence elsewhere of scarlet fever only 29 cases of fectious diseases occurred as compared with 41 in the previous ar. The cases notified were :—scarlet fever 8, diphtheria 3, acute imary pneumonia 7, acute influenzal pneumonia 6, pulmonary berculosis 4, non-pulmonary tuberculosis 1.

All the cases of scarlet fever and of diphtheria were removed to spital as was one of the cases of acute primary pneumonia. All her cases were treated at home.

Unfortunately, three deaths from tuberculosis occurred, two of them ing cases notified in previous years. Four person died of influenza. herwise no deaths were due to infectious diseases.

There are seven registered dairy farms in the United Burgh accom-odating 126 cows, and one registered dairy shop. There is also one

small unregistered dairy farm. Although all the premises were kept a reasonably clean state most of them fall short of the requirements the County Dairy Bye-laws. A few of them are so structurally defe tive and so situated that improvements would be very difficult a costly to effect. All the dairies in the County are being dealt with a in due course the attention of the dairymen concerned will be drawn the need for alterations.

Kilrenny Mill and Milton Dairy Farms underwent considera reconstruction during the year and are now well up to modern standar

Grade A Milk continued to be sold from Kilrenny Mill Dairy Far The premises were kept under supervision and the cattle were examin regularly. Samples of milk were collected for analysis as to butter-f content and as to purity. All samples were found to comply with t requirements of the Regulations. Provided the cows pass the necessa test there is nothing to prevent the Dairy producing a higher a better type of graded milk.

Frequent visits of inspection were paid to the slaughterhouse a the attention of the Town Council was drawn to certain matters whi call for remedy. The premises were kept in a good state of cleanlin and are in the main well adapted for the production of clean meat.

During the year 761 cattle, 1,745 sheep and 232 pigs were slaughter 8,288¾ lbs. of meat were condemned and destroyed as unfit for hum consumption.

BURGH OF NEWPORT.

According to the estimate of the Registrar General the populati was 3,724. The birth rate was 7 per 1,000 of population. The dea rate was 14·3 per 1,000 of population. Both rates were higher th the corresponding rates for the previous year. One death occurr among infants under one year of age. The chief causes of death w cerebral haemorrhage, diseases of the heart and arteries, diseases f the lungs and cancer. No less than 87 per cent. of the total number f deaths, however, occurred among people of 55 years of age and ove

Apart from scarlet fever the incidence of infectious diseases genera was negligible. The following number of cases occurred :—

Typhoid Fever	1
Scarlet Fever	5
Erysipelas	1
Acute Primary Pneumonia	1
Acute Influenzal Pneumonia	1
Pulmonary Tuberculosis	2
Total	1

All the cases of scarlet fever and the case of influenzal pneumo were removed to hospital. The other patients were treated at hom

Two persons died of influenza and three persons of tuberculosis.

There are three registered dairy farms and two registered dairy shops in the Burgh. Frequent visits of inspection were paid to these. Some of the dairy farms do not comply with the requirements of the County Dairy Bye-laws which govern their structure and equipment. Proprietors have been notified regarding deficiencies and asked to rectify them. Time will be allowed for the execution of the necessary works but it is expected that each year a reasonable amount of improvement will be effected.

There is one private slaughterhouse. In certain respects it does not come up to the requirements of a modern slaughterhouse but it was always found to be kept in a clean and tidy state. Visits of inspection were frequent and on no occasion were conditions such as might have an injurious influence on the safety of the meat supply.

Meat inspection is in the hands of the County Sanitary Inspector who is empowered to call in a Veterinary Surgeon in cases of difficulty or doubt.

Over four hundred animals were slaughtered and 242 lbs. of meat were condemned as unfit for human consumption.

BURGH OF PITTENWEEM.

The estimated population was 1,685. The birth rate was 11·3 per 1,000 of population and the death rate 10·1 per 1,000 of population. Two deaths occurred among infants under one year of age, the infantile mortality rate being 105·3. Two children in the one to five years of age group died. The chief causes of death were heart disease, tuberculosis, cerebral haemorrhage and premature birth. Of the total number of deaths which occurred 41 per cent. were among people of 65 years of age and over. A tendency towards death during the prime of life continues.

A slight increase occurred in the incidence of infectious diseases, mainly as a result of scarlet fever and pneumonia. The following number of cases occurred :—

Scarlet Fever	10
Diphtheria	2
Erysipelas	2
Acute Primary Pneumonia	2
Acute Influenzal Pneumonia	3
Pulmonary Tuberculosis	4
Non-Pulmonary Tuberculosis	2
Total	25

All the cases of scarlet fever and of diphtheria and one of the cases of pneumonia were removed to hospital. The others were treated at home. Three persons suffering from tuberculosis died and a death occurred among the cases of pneumonia.

There are five dairy farms in the Burgh. During the year one dairy shop was given temporary registration pending completion of works o improvement.

Modern standards of dairying are very exacting. Not only ar sanitary premises, clean utensils and careful methods necessary require ments but clean, healthy cows are essential. It is exceptional to fin these attributes so well developed in burghal dairy farms as in thos situated in rural areas. The age of premises, their congestion an difficulties in connection with pasturage combined to render dair farms situated in towns, for the most part, undesirable.

It is not to be expected, therefore, that the dairy farms in Pittenween are all that can be desired. Several of them are far below standard and in view of financial and other considerations must disappear.

The meat supply is drawn for the most part from the Publi Slaughterhouse at Anstruther where meat inspection is undertaken b County Council Officials. Strict precautions are taken to ensure tha no unsound meat reaches the public. There are no private slaughter houses in the Burgh.

BURGH OF ST. ANDREWS.

The population of the Burgh as estimated by the Registrar Genera was 8,697. The birth rate was 10·3 per 1,000 of population. The deat rate was 13·9 per 1,000 of population, a figure slightly greater than tha of the previous year. There was only one death among infants unde one year of age—the lowest recorded mortality among infants. On th other hand there were three deaths among children in the one to fiv years of age group. Diseases of the heart and arteries were again th principal causes of death, 40 per cent. of the total number of death being due to these. Cancer claimed 16 per cent. Respiratory disease and diseases of the digestive tract each caused 9 per cent. of the tota deaths. Three per cent. was due to tuberculosis. Sixty-three per cent of the people who died were 65 years of age and over.

The following number of cases of infectious diseases were notified :—

Paratyphoid Fever	1
Scarlet Fever	24
Diphtheria	1
Erysipelas	1
Acute Primary Pneumonia	6
Acute Influenzal Pneumonia	8
Pulmonary Tuberculosis	3
Non-Pulmonary Tuberculosis	1
Puerperal Pyrexia	3
Total	48

The comparative incidence of infectious diseases was low. In view of the national prevalence of scarlet fever and of the fact that almost

ten years have elapsed since the occurrence of the last epidemic in the Burgh, it was to be expected that an outbreak of considerable proportions would follow the appearance of cases in the local schools. Cases occurred only intermittently, however, and no indications of epidemic spread followed.

Two deaths were due to influenza and four to tuberculosis. Otherwise infectious diseases had little influence on mortality.

109 patients were treated in the City Fever Hospital, 83 of these, however, came from other parts of the County. On account of the fact that no accommodation was available at the time, nine patients were transferred to other hospitals outwith the Burgh. Two deaths occurred in the hospital.

Pressure of work and inadequate staff led to a reduction in the number of persons immunised against diphtheria. Only 14 children received the necessary course of injections.

There are four registered dairy farms and four registered dairy shops in the Burgh. All the premises were visited from time to time during the year. With one exception their structure complies reasonably well with the County Dairy Bye-laws. One shop was also considered to be below the standard of requirements.

Fifty-seven cows were accommodated in the four byres. These were inspected by the County Veterinary Inspector on two occasions.

Samples of milk were collected for analysis and all except one were found to comply with legal standards of quality. The average butter-fat content of the samples taken was 3·71 per cent., the least permissible amount being 3 per cent.

Certified milk continued to be sold in the Burgh from Wester Balrymonth Dairy Farm, Mount Melville Dairy Farm and Springfield Dairy Farm. The City Fever Hospital, the Child Welfare Centre and the residential houses at St. Leonards School for Girls are supplied with this milk. There is still room for an increased consumption of Certified milk on the part of private individuals.

The Public Slaughterhouse, which was opened in 1932, is of up-to-date construction and equipped with modern appliances conducing to the minimum amount of handling of carcases. One or two small matters were brought to the notice of the Town Council and remedies were applied. Meat inspection is carried out by Mr. Peter Young, M.R.C.V.S., who was appointed Meat Inspector and Detention Officer by the County Council. All carcases were inspected by him before removal.

During the year 6,139 animals were slaughtered—1,100 cattle, 4,544 sheep, 427 pigs and 68 calves—as compared with 4,661 animals in 1932. 17,874 lbs. of meat were condemned and destroyed as unfit for human consumption as compared with 4,803 lbs. in 1932.

BUROH OF ST. MONANCE.

According to the estimate of the Registrar General the populatio was 1,690. The birth rate was 10·05 per 1,000 of population. Th death rate was 16·5 per 1,000 of population. One death occurre among infants under one year of age. The principal causes of deat were heart disease and cancer. 57 per cent. of the total number c deaths occurred among people of 65 years of age and over.

Only 11 cases of infectious diseases occured, viz :—

Scarlet Fever	
Diphtheria	
Erysipelas	
Acute Primary Pneumonia	
Puerperal Pyrexia	
Non-Pulmonary Tuberculosis	
Total	1

All the cases of scarlet fever and the case of diphtheria were treate in hospital. The other patients were treated at home. No deaths wer due to any of the infectious diseases.

There are no slaughterhouses or dairy farms in the Burgh whic draws its meat and milk supplies from other parts of the County.

BURGH OF ELIE AND EARLSFERRY.

The population in 1933 was estimated to be 984, no increase c decrease having been defined. The birth rate was only 5 per 1,00 of population while the death rate was 17·3 per 1,000 of population, figure exceeding the birth rate by 12·3. There were no deaths amor infants or children. The chief causes of death were diseases of the hea and arteries and cancer. Seventy per cent. of the total number c deaths occurred among people over 55 years of age.

Only 13 cases of infectious diseases were notified :—

Scarlet Fever	
Diphtheria	
Total	

All the patients were treated in hospital and made satisfactor recoveries.

No deaths were due to any of the infectious diseases.

There are no dairy farms within the Burgh. One dairy shop ar one grocer's shop are licensed to sell Certified Milk. Another grocer shop is licensed to sell Grade A Milk.

The bulk of the town's supply comes from dairies in its immedia vicinity. Three of these produce Grade A Milk. The standard cleanliness of the milk consumed in the Burgh is high, which fact ma

have a bearing on the continued low incidence of infectious and catarrhal illnesses.

Meat supply is drawn from the public slaughterhouse at Anstruther and from a private slaughterhouse at Colinsburgh. Both premises were kept under close supervision throughout the year and no evidence that unsound meat was reaching the public was obtained.

Slaughtering of animals within the Burgh does not occur.

BURGH OF CRAIL.

According to the estimate of the Registrar General the population of the Burgh remained stationary at 1,054. The birth rate was 2·7 per 1,000 of population as compared with 7·6 in the previous year. The death rate was 16·1 per 1,000 as compared with 27·5 in the previous year. No deaths occurred among infants or children under 10 years of age. Sixteen of the seventeen deaths which occurred were among persons of 55 years of age and over. Diseases of the heart and arteries, diseases of the lungs and cancer were the principal causes of death.

The incidence of infectious diseases continued to be low. Scarlet fever 13, erysipelas 2, acute primary pneumonia 1, acute influenzal pneumonia 1, pulmonary tuberculosis 2—total 19.

Twelve of the cases of scarlet fever were removed to hospital—otherwise all the patients were treated at home.

Two persons died of influenza. Otherwise no deaths were due to infectious diseases.

The epidemic of scarlet fever which was prevalent in the County throughout the year had little effect on the Burgh. The cases which occurred were all of comparatively mild type.

A notable improvement took place in the Burgh in connection with the sale of graded milk, one of the County dairy farmers who sold ordinary milk having been granted a licence to sell Grade A Milk after he had renovated his premises, installed modern equipment and produced a milk which was within the standard of purity required by the regulations.

The number of unregistered dairy premises in the Burgh was reduced to two, one of the dairymen having given up business. One of the remaining dairies could be brought up to modern standards without undue cost : the other is generally in such a defective state that renovation is out of the question. The number of people who consume milk from these premises is fortunately limited. Nevertheless, they remain sources of milk supply which must be regarded as unsafe.

The only slaughterhouse in the Burgh is a private one which, although it does not comply with requirements in certain respects is reasonably suitable for the purpose. Meat inspection is in the hands of the County

Sanitary Inspector in consultation, when necessary, with a Veterinary Surgeon. There were no indications that unsound meat was reaching the public.

During the year over 250 animals were slaughtered and 156 lbs. of meat were seized as unfit for human consumption.

BURGH OF AUCHTERMUCHTY.

The population of the Burgh, according to the estimate of the Registrar General was 1,247. The birth rate was 10·4 per 1,000 of population as compared with 14·7 in 1932. The death rate was 20·8 per 1,000 of population as compared with 15·5 per 1,000 in 1932. There again was one death among infants under one year of age. Diseases of the heart and arteries were the chief causes of death, cancer, diseases of the kidneys and senile decay together occupying second place.

The epidemic of scarlet fever which was rife in the County made only a slight impression on the incidence of infectious diseases. In all, 11 cases were notified—scarlet fever 8, diphtheria 1, erysipelas 2. The case of diphtheria and seven of the cases of scarlet fever were treated in hospital. The other cases were treated at home. All made satisfactory recoveries.

Four persons died of influenza. Otherwise no deaths were due to any infectious disease.

There is one registered dairy farm and one registered dairy shop in the Burgh. No cause for complaint or need for special action arose in connection with either. The greater part of the milk supply is provided from dairy farms situated in the landward part of the County. The County Sanitary Officials and the County Veterinary Inspector kept all sources of supply under observation and special attention was paid to cleanliness of premises, methods of milk production and health of animals. The consumption of graded milk continues to be low although a Certified Dairy Farm is nearby.

Frequent visits of inspection were paid to the two private slaughterhouses which are the main sources of meat supply. Both premises fall short of present day structural requirements but were kept in a reasonably clean state. Meat inspection is in the hands of the Sanitary Inspector who is empowered to call in a Veterinary Surgeon in cases of difficulty or doubt. 813 animals were slaughtered and 315 lbs. of meat were condemned as unfit for human consumption.

BURGH OF CUPAR.

The population was estimated to be 4,727 by the Registrar General. The birth rate was 13·7 per 1,000 of population and the death rate 14·8 per 1,000 of population as compared with rates of 17 and 10·3 respectively in 1932. Although numbers are too small to permit of

accurate deductions, it is noteworthy that the infant mortality rate showed a still further increase since 1930 to 61 per 1,000 births. Diseases of the circulatory system were the chief cause of death. Cerebral haemorrhage came next, followed by cancer and diseases of the lungs respectively. There were two deaths each from scarlet fever and whooping cough and one death from influenza. Tuberculosis caused two deaths. The majority of the population, however, lived to see their three score and ten years, no less than 61 per cent. of the total deaths having occurred among people of 65 years of age and over.

The incidence of notifiable infectious diseases was as follows :— scarlet fever 115, erysipelas 7, ophthalmia neonatorum 2, acute primary pneumonia 2, pulmonary tuberculosis 4, non-pulmonary tuberculosis 5, puerperal pyrexia 1—Total 136.

The epidemic of scarlet fever was more manifest in Cupar than in any other of the more densely populated places in the East of Fife. Every endeavour was made to check the spread of the disease particularly among school children. Throughout the epidemic the local general practitioners were very helpful indeed and did much to prevent the outbreaks assuming still greater proportions. It is to be feared that some parents were to some extent responsible for the progress of the infection since, failing to summon medical advice during acute illness, they sent children back to school with discharging ears, and noses, whereby other children were infected. All things considered, however, matters might have been much worse.

None of the other infectious diseases caused much trouble from the epidemiological point of view.

With one exception the cases of scarlet fever were removed to hospital. Hospital accommodation was also found for the following cases— erysipelas 1, ophthalmia neonatorum 1, acute primary pneumonia 1, pulmonary tuberculosis 4, non-pulmonary tuberculosis 1, puerperal pyrexia 1. Since beds in the East of Fife hospitals were required for numerous patients from the West of Fife, Cupar patients, in common with patients from all the other small burghs were distributed among the various hospitals according as beds became vacant.

The dairy premises in the Burgh were inspected from time to time. In some of them improvements are necessary, particularly in those premises where cows are kept. To these the County Dairy Bye-laws are now applicable. These Bye-laws set a high but necessary standard of dairy construction and it will not be easy for renovations to be sufficiently comprehensive. Defects are being noted, however, and every opportunity will, in due course, be given proprietors of complying with requirements.

A special outlook was kept for any methods or circumstances having an injurious influence on the safety of the milk supply. Where remedies could be readily applied, they were called for. In no cases, however, were measures of severe nature found to be necessary.

Certified milk continued to be available at the Barony Dairy which is supplied from Hospital Mill Dairy Farm at Springfield. Strictest precautions are taken to prevent this type of milk from becoming contaminated with the germs of disease so commonly found in ordinary milk. It is the safest and purest milk that can be consumed.

Frequent visits of inspection were paid to the Public Slaughterhouse in connection with meat inspection which is in the hands of the County Sanitary Inspector in collaboration with the Superintendent. In cases of difficulty or doubt a Veterinary Inspector is called in. Structural conditions at the Slaughterhouse are the concern of the Town Council but it is difficult to ignore the relation which the obvious defects of the premises bear to the safety of the meat supply. During the year 714 cattle, 1,728 sheep and 621 pigs were slaughtered. 3,838 lbs. of meat were condemned as unfit for human consumption.

BURGH OF FALKLAND.

The population as estimated to the middle of the year was 844. The birth rate was 8·3 per 1,000 of population and the death rate 14·2 per 1,000 of population. In 1932 the corresponding figures were 15·4 and 18·0 respectively. While the death rate continued to be in excess of the birth rate both figures were reduced. There were no deaths among infants under one year of age or among children. Of the 12 persons who died, six were of 65 years of age and over.

Only seven cases of infectious diseases were notified—scarlet fever 4, erysipelas 1, non-pulmonary tuberculosis 2. The effects of the scarlet fever epidemic were hardly perceptible in the Burgh. With the exception of the cases of tuberculosis, all patients were treated in hospital. One person died of tuberculosis. Otherwise no deaths were due to infectious diseases.

No circumstances worthy of mention arose in connection with the milk supply. Premises were kept in a reasonably satisfactory state and no signs of gross contamination of milk were observed.

There is one private slaughterhouse in the Burgh. It was visited at all hours and was never found to be in any other than a clean condition. Carcases were closely inspected by the County Detention Officer before removal. 60 cattle, 147 sheep and 16 pigs were slaughtered and 92 lbs. of meat were condemned as unfit for human consumption.

BURGH OF LADYBANK.

According to the estimate of the Registrar General the population was 1,170. The birth rate was 10·0 per 1,000 of population as compared with 14·6 in 1932. The death rate was 19·6 per 1,000 of population as compared with 13·7 in 1932. There were no deaths among infants but one death occurred among children in the 1-5 years of age

group. Diseases of the heart were the chief cause of death. 70 per cent. of the total number of 23 deaths which occurred were among people of 65 years of age and over.

The incidence of infectious diseases was again exceptionally low, only one case of scarlet fever and one case of non-pulmonary tuberculosis having occurred. The former was treated in hospital, the latter at home.

Nothing worthy of special mention occurred in connection with the milk supply. The burgh is supplied with milk mainly from dairy farms in the County, there being only one dairy farm within the Burgh. A reasonably satisfactory standard of cleanliness was maintained in all the premises concerned although several of them fell short of the structural requirements of the Bye-laws.

For purposes of meat inspection the single private slaughterhouse was visited regularly. 106 cattle, 176 sheep and 83 pigs were slaughtered. 99 lbs. of meat were condemned as unfit for human consumption.

BURGH OF NEWBURGH.

The estimated population was 2,170. The birth rate was 16·5 per 1,000 of population and the death rate 17·9 per 1,000 of population. In 1932 the corresponding figures were 17·4 and 17·4 respectively. The infantile mortality rate rose during the year from 26 per 1,000 births to 111 per 1,000 births. The principal causes of deaths were heart disease and cerebral haemorrhage. 48·7 per cent. of deaths occurred among people of 65 years of age and over, a more even distribution of ages at death throughout the age periods being characteristic of the year, the main tendency being towards an increased number of people dying in the prime of life.

The number of cases of infectious diseases was fewer than in the previous year. The following cases were notified :—scarlet fever 3, erysipelas 1, ophthalmia neonatorum 2, acute primary pneumonia 4, acute influenzal pneumonia 4, pulmonary tuberculosis 1, non-pulmonary tuberculosis 4—Total 19. All the cases of scarlet fever and one case of non-pulmonary tuberculosis were removed to hospital for treatment. The others were treated at home. Five deaths occurred from tuberculosis and one from influenza.

The bulk of the milk supply is drawn from the County District. There are, however, two dairy farms in the Burgh. No indications were discovered that the safety of the supply was being injuriously affected. The consumption of graded milk continues to be low. The purity of Certified Milk and its freedom from the germs of tuberculosis do not yet seem to have been appreciated by the population.

The County Sanitary Inspector in his capacity as Detention Officer visited the three private slaughterhouses regularly. Although the condition of slaughterhouse premises is a matter which concerns the

Town Council only, it was noted on many occasions that structural defects were such as to be obviously adverse to the production of clean wholesome meat. A certain amount of safeguard was secured so far as meat inspection is concerned by curtailment of hours of slaughter whereby the Sanitary Inspector was given a more reasonable opportunity of carrying out his duties. 113 cattle, 30,509 sheep and 6 pigs were slaughtered. 225 lbs. of meat were condemned and destroyed as unfit for human consumption.

BURGH OF TAYPORT.

The population was estimated to be 3,278 at the middle of the year. The birth rate was 12·5 per 1,000 births. In 1932 it was 13·2 per 1,000 births. The death rate was 17·6 per 1,000 of population, the figure for the previous year being 12·3. The infantile mortality rate was 97·5, a slight increase on the figure for the previous year. There can be no doubt, however, that the observation of mothers and infants carried out at the Child Welfare Centre has contributed towards the continued reduction in the infantile mortality rate which, prior to its inception was always much higher. Cancer, diseases of the lungs and heart disease were the three chief causes of death. 60 per cent. of the total number of deaths occurred among people of 65 years of age and over.

An increase occurred in the incidence of infectious diseases particularly as reagrds scarlet fever, pneumonia and tuberculosis. The following number of cases were notified :—scarlet fever 15, diphtheria 1, erysipelas 7, acute poliomyelitis 1, acute primary pneumonia 6, pulmonary tuberculosis 5, non-pulmonary tuberculosis 2. With two exceptions all the cases of scarlet fever were isolated in hospital. The case of diphtheria and two cases of pulmonary tuberculosis were also removed for hospital treatment. All other cases were treated at home. Deaths from infectious diseases were—whooping cough 1, influenza 3, tuberculosis 1.

The milk supply and all that pertains to the production of clean milk was kept under supervision throughout the year. Premises and animals were inspected and no condition to which serious exception could be taken came to light. Unfortunately, trade conditions in the Burgh are not such as to encourage householders to expend the little extra necessary for the purchase of graded milk, otherwise a definite step would be taken towards the removal of one of the known sources of those infectious ailments from which the town is never free.

The private slaughterhouse was visited at least twice weekly by the County Sanitary Inspector in his capacity as Detention Officer. A reasonably satisfactory degree of cleanliness was maintained by the butchers. 192 cattle, 263 sheep and 26 pigs were slaughtered. 335 lbs of meat were seized as unfit for human food.

Sanitary Inspection Districts.

The Annual Report in respect of each sanitary inspection district has been submitted for the information of the local public health sub-committee and to the Department of Health for Scotland. The following are brief excerpts from the reports of the Sanitary Inspectors :

DUNFERMLINE AREA—W. Davison, Sanitary Inspector.

Water Supplies.

The Dunfermline Area of the County of Fife is supplied with water derived principally from two sources, viz., Glenquey Burn and the River Devon, both in Perthshire.

Throughout the long continued drought of the summer and autumn, the supply was plentiful as a result of the foresight of the members of the old District Committee in inaugurating the Glendevon supply.

The good quality of the water was maintained throughout the year.

All villages and populous places are provided with Area supply which, in some cases, supplements the local supply.

Certain neighbouring Authorities continue to derive their supplies from off the County mains.

Drainage and Sewage Disposal.

There are 10 Special Drainage Districts in the Dunfermline Area, viz., Aberdour, Blairhall, Charlestown, Limekilns, Crossgates, Crossford, North Queensferry, Tulliallan, Valleyfield and Torryburn and Saline.

At all, except three of these Districts the sewage is discharged directly, without previous screening, into the Forth estuary.

At Crossford, which village was formed into a Special Drainage District during 1930, the sewers are connected with the old Dunfermline Burgh sewer which discharges into the Forth estuary near Charlestown.

At Saline and Blairhall, Purification Works are provided and the effluent discharged into streams.

I have referred in previous reports to the Purification Works at Blairhall which are inadequate to deal efficiently with the increased flow of sewage. These works were reported on by the County Engineer and myself and the extension of the filtering area was recommended. Considerable maintenance charges are being incurred in keeping in operation the present distributors which are of the Fidian Rotary type, and which are worn out. Improvements on these Works are urgently required.

At Crossgates, sewage works of an old and inefficient type are in operation. The pollution of the Moubray Burn, which receives the

effluent from these works, has for long been complained of. The scheme, which has been under consideration for some years, for linking up the drainage from the villages of Hill of Beath and Crossgates with the Dunfermline Burgh sewer at Touch was finally agreed to and the main and branch sewers are now in course of construction, the work having been commenced in October last. The boundaries of Crossgates Special District have been extended to include Hill of Beath and Halbeath, which latter village is presently without drainage. This will mean the provision by the owners of drainage facilities to houses at Halbeath and their connection to the public sewers. The work will follow immediately on completion of the laying of the new sewers.

Villages in the Area still without adequate drainage facilities are Cairneyhill, Hillend, Oakley, Donibristle, Comrie and Wellwood.

At Cairneyhill, Donibristle and Hillend, disposal facilities are lacking and it may well be impossible ever to provide drainage to these villages at reasonable cost.

Donibristle is a decadent village, no work now being carried on in the District. Most of the houses in the village have been demolished, some three dozen only now remaining the majority of which are unfit for human habitation.

At Oakley Rows, all the houses have been reported as unfit for occupation and on the completion of the Council's housing scheme at Comrie they will be demolished and Oakley Village will then cease to exist.

The urgent necessity for the provision of proper drainage facilities at Wellwood has for some years been stressed by me in these reports. The matter has been under consideration by the County Council and the Colliery Company, who own practically the whole village, for some considerable time now.

The proposal is to provide a drainage system and connect the outfall with the Dunfermline Burgh sewer from Townhill. On the instructions of the Colliery Company, a survey of the houses was made with a view to estimating the cost of carrying out improvements and providing drainage facilities with inside water supply fitments, etc., to each of 87 houses under their control. It was reported that the scheme would be eligible for Grant in terms of the Council's Scheme of Assistance under the Housing (Rural Workers) Act, and the matter is presently under consideration by the Colliery Company.

Scavenging.

There are 6 Special Scavenging Districts in the Area, viz., Aberdour Crossgates, Limekilns and Charlestown, North Queensferry, Tulliallan and Valleyfield and Torryburn.

The refuse in each of these Districts is collected daily. The method of disposal in operation at all Districts is that known as Controlled Tipping, by which method nuisance is reduced to a minimum or even

eliminated altogether. Much care and attention were given to this matter during the year and the recommendations of the Department of Health, contained in a circular letter issued in the earlier part of the year, were given careful consideration. A copy was also issued to all scavenging contractors.

An example of how this method of refuse disposal should be conducted may be seen at Shorefield Park, near Culross, where the refuse from Valleyfield and Torryburn Special Scavenging District is deposited. Here, of course, conditions are ideal, but it is well to remember that elsewhere the available sites and other circumstances do not always lend themselves to the adoption of the ideal methods.

The work in each District is carried out by contractors who undertake, for a period of a year, to collect and dispose of the refuse, trim and top-dress the coup, sweep streets and footpaths, clean out road surface water gullies, etc.

Sanitary Conveniences, etc., used in common.

The position as regards sanitary conveniences used in common remains as previously reported, with the exception that at Charlestown all privies have now been abolished and these substituted by water closets, one to each house.

Housing.

The year under review constituted another period marked with ceaseless activity in matters relating to housing. Exhaustive surveys, amounting, in some cases, to practically house to house inspections, were carried out over the whole area in order to ascertain the number of additional houses likely to be required in the next five years. This work, with the staff available, presented an extremely formidable task and rendered the carrying on of routine and other work very difficult indeed. In addition to the number of unfit houses, the requirements of families living under overcrowded conditions and those in sub-let houses had to be ascertained.

The number of houses required to replace unfit houses, after deducting new houses already sanctioned by the County Council, was found to be 217. The number required to accommodate persons living under overcrowded conditions and in sub-let rooms was 53. In addition, it was estimated that 10 houses would be required to accommodate persons desirous of getting married, thus making a total of 280 additional houses required within the next five years.

Housing (*Rural Workers*) *Acts*, 1926 *and* 1931.—Inspection of rural workers' houses in the Area was continued from time to time throughout the year. As has been customary since the inception of the Act, inspections were followed by letters to the owners calling for any necessary repairs and making suggestions for improvements to the houses with financial assistance by way of grants in terms of the Council's scheme under the Act.

As a result of these activities, plans for the improvement of 34 houses were submitted and approved during the year, thus bringing the total of rural houses so improved since the commencement of the Act, up to 189.

Clearance or Improvement Areas.—Up to the end of the year, no resolutions regarding the declaration of any Clearance or Improvement Areas in the Dunfermline Area of Fife had been passed by the County Council.

Twenty-four cases of overcrowding were dealt with during the year. In every instance, intimations in terms of Section 19 were served on the occupiers. In all but two of these, the overcrowding was due to sub-letting. The majority of the sub-tenants were found to be unemployed persons and their families who had been ejected from their houses due to non-payment of rent, etc. This type of overcrowding is singularly difficult to deal with because abatement of the nuisance in one house is usually followed by its creation in another. Houses provided to accommodate these people would require to be let at very low rents indeed.

Meat.

The three private slaughterhouses situated at Aberdour, Kincardine and Culross Burgh were kept under very close supervision. Those at Aberdour and Culross are brick structures with cement floors, and that at Kincardine is of wood, brick lined to a height of 6 ft. and with a cement floor. All three have satisfactory drainage arrangements.

The hours and days for slaughtering at each place are fixed in terms of the Meat Regulations. This was designed to facilitate inspection of meat killed but, as the regulations also make for provision butchers killing at times other than those arranged, it frequently happens that the butchers, due to business exigencies, take advantage of this and intimate killing at times other than those fixed. This makes the inspection of all meat killed a matter of extreme difficulty, but notwithstanding, every endeavour was made during the year to be present at times of slaughter and when this was not practicable, the carcases and viscera were examined soon afterwards, and before sale.

Sale of Food Order 1921, Merchandise Marks Act 1926, and Orders-in-Council Relative to Marking of Imported Food-Stuffs, Etc.

The provisions of the Merchandise Marks Act and the Orders-in-Council thereunder were also given attention during these inspections. The issue of leaflets to traders and vendors, some two years ago, detailing the commodities affected by the Orders and explaining the provisions as to labelling, etc., was followed by increased attention being given to the matter by those conecrned. There is still evidence, however, of some ignorance of the Act and Orders and quite a number of

contraventions were encountered last year. On each occasion a warning was given which had the desired effect. Vendors with lorries and carts are the worst offenders, and constant vigilance is necessary with them to ensure compliance with the Orders.

Storage, etc., of Food for Human Consumption.

There are no large food-stuffs manufactories in the Area. Periodical inspections of such places as bakeries, creameries, retail butchers' shops, fruit and vegetable and fish shops, etc., were carried out. The general trend in most of these places is towards cleaner premises and more hygienic methods of handling and storage of foods. This improvement has been markedly noticeable for the past year or two. It is observed, too, that an increasing number of the products of the larger food manufacturers, which are exposed for sale in retail shops, are being wrapped or enclosed in air tight or dust proof containers. Retailers are also showing an appreciation of the purer food movement by installing dust proof windows and show cases, and commodities which require to be shown are thus protected from contamination while so exposed for sale. Other factors, such as the awakening of the buying public to the importance of this subject, the keenness of competition, etc., are all contributing in the movement towards a purer food supply.

BEATH AREA—C. A. Alexander, Sanitary Inspector.

Water Supply.

By whatever grace one cares to term it, West Fife, or at least the Landward part of it, of which Beath Area is a part, was entirely free from anxiety regarding a water supply, during the totally exceptional period of 1933. Possibly Dunfermline District Committee of other days is due a special word of commendation for their foresight in providing the splendid storage at Glendevon. One wonders what would have happened without it. It seems a pity that such resources cannot be made available for a greater area than at present, but so long as purses are tender, we suppose the main object will be lost sight of. To us it seems ridiculous, and a sheer waste of public money to have the mains of four or five authorities running side by side, carrying water from various sources, to the various parts of a particular area. It is not only ridiculous, but there is something wrong somewhere. Whether we like it or not, it seems that a pooling of water resources must take place, and we reckon it is only a question of time 'ere it comes about.

As we have said, we were fortunate here, and that means a whole lot more than some people imagine. Never at any time was the area inconvenienced, and the quality occasioned no complaints.

Drainage and Sewage Disposal.

KELTY.—The whole of Kelty, with the exception of a few houses at Canstdam, has a fairly satisfactory drainage system.

Unfortunately, the purification works, consisting of septic tanks and rotary sprinklers, have suffered pretty severely from underground workings. The movement is still being felt. Bad as things are, we can keep the works going for a bit yet, we think so at any rate, or rather we hope so.

During the incoming summer the main outfall from these works to the river will be relaid, and this will tend to relieve the worst of the trouble through the sinking of the works, and the present ponding which is taking place.

Scavenging.

The arrangements for the Area are as follows :—

LASSODIE.—Contract. Four collections of Refuse and two collections from privies per week.

HILL OF BEATH.—Fife Coal Company provide a daily collection.

KELTY.—Direct labour. Two horses and carts, two carters and two scavengers employed. Alternate daily collection to each of two districts.

In every case the methods in vogue are satisfactory, although the open cart is still being used at Hill of Beath.

Disposal by tipping is adopted throughout the area, three tips being in use at Kelty, other places having the single tip. We have no trouble at all, except at one of the Kelty tips, where youngsters are causing a lot of trouble by firing the dump after working hours, despite the fact that the tip has been covered over. Naturally, folks staying nearby have complained, but the young fire-raisers are too cute for us. We are abandoning this particular tip for another and this will effectually put an end to this little bit of worry.

Rivers Pollution.

As circumstances warrant, we go wandering along the banks of the streams and rivers. Last year we saw nothing to complain of. It would seem that our friends have now acquired an interest in clean streams, and if only for appearances sake, a little effort is well worth while. What a difference there is in seeing a clear sparkling stream of water, compared to the sulky and sluggish, sewage and coal polluted water.

Housing.

There is still a decided deficiency of houses for the working classes. My summarised estimate is therefore :—

Houses required.	3-*Apartment.*	4-*Apartment.*
Kelty	85	8
Hill of Beath	94	8
Lassodie	40	..
Nett Total for Area	219	16
	235	

Overcrowding exists to a fair extent. We would not say it was extraordinary, but our point is that we can do nothing to help, or even check it.

And here again we much regret having to criticise our friends the Government. The proposed standard for overcrowding is impossible under present conditions. The ideal it may be, but ideals in these days must take second place to stark necessities. No, no, that sort of thing will not help at all and injures rather than assists the position. Local Authorities, at least those worth calling Local Authorities, and we reckon we have as active bosses as anybody, know their requirements best. Why, therefore, this continuous barrage of fearful statistics ? And all the time not a single house is being built. We suppose we will muddle through as usual, but it shames us to think of what could be done and what is being done.

Well anyway, overcrowding, sub-letting and insanitary houses still exist in too many cases for our liking.

Food Supply.

Milk and Dairies.—Cowsheds, byres and dairy premises all conform to the Bye-laws.

Dairymen and their employees in many instances show that the production of clean milk is not just a mere secondary condition. It is a real treat to visit these dairies, and how nicely we are received. There are others who apparently have not yet acquired the complex. We are doing our best to show them the way. When one looks back and compares things now, with those some years ago, one gets a fair idea of the progress made. We can reasonably claim for our dairymen that headway has been made, and we hope the right spirit will continue now.

The provisions of the Milk Order 1925 are almost generally complied with. We found one bright lad who had his wireless accumulator sitting among his milk cans.

The regulations governing imported food are fairly well observed.

The gradual improvement of the premises in cleanliness and in the handling of food-stuffs, is again to be noted. The propaganda of past years is bearing fruit and the public are in a way responsible for this desirable improvement. Things were never at any time really bad, although we have encountered one or two peculiar cases. We imagine the general desire for better things has affected this particular niche of

public health concern, and so long as we are progressing in this direction need we interfere ? We think the public themselves directly contro this business, although they do not see what goes on behind the scenes That's where we come in.

We understand there is a move to close down all private slaughter houses, and only have slaughtering in central public places. W heartily approve of the principle. What we do not approve of is tha the policy should be put into force at once, for the simple reason tha it cannot reasonably be done. We cannot very well give reasons here as we might fall out with our other Burghal half, but we would advis delay, until circumstances really allowed of the putting up of th shutters on private places, in our area at any rate.

LOCHGELLY AREA—J. S. E. Riddle, Sanitary Inspector.

General Sanitation.

Water Supplies.—All the Special Districts and groups of house throughout the Area are supplied with water from County Mains. A good and ample supply has been available all year. The Northern par of Kinglassie parish is about the only district where county water i not available and private supplies are in use. Only one complaint a to the want of water was received.

The houses at Coalden, Cluny, are supplied from one outside tap When the question of improving these houses and providing insid water supply was being considered it was found that the present suppl was too intermittent to allow for these improvements being carried out This was reported to the Water Committee but as yet nothing has bee done to improve the supply.

Drainage and Sewage Purification.—There are four Special Drainag Districts in this Area, viz. :—Auchterderran, Lochore and Glencrai Lumphinnans and Kinglassie.

Auchterderran Special Drainage District.—This is the only Distric which has Purification Works.

The outfall sewer is very flat and a considerable amount of work ha to be done each year in scraping and cleaning sewers to prevent siltin up as some of them are affected by underground workings.

At the works the humus tanks are below the level of the river and a flooded when the river rises. These tanks had never been properl cleaned out and were doing the effluent more harm than good. I ha the humus tanks thoroughly cleaned out during the summer and th outfall in the river extended a short distance and turned with the flo

I reported in July as to the state of the Works, especially regardi the condition of the distributors which were requiring renewal, an pointed out that the works were now dealing with a greatly increas

olume of sewage since first installed twenty years ago. It was greed to ask the County Engineer to report on the whole question efore considering the renewal of the distributors.

In November the County Engineer reported on the works and sug- ested the following improvements :—An additional detritus tank, ltering the main settlement tank and taking roof off same, extending he filter beds, providing new distributors, providing pump for humus anks and extending the effluent outfall. The total estimated cost to e £2,150.

The matter had not been considered by the Auchterderran Drainage ub-Committee before the end of the year.

These works were constructed in 1913 and are now dealing with a reatly increased flow of sewage. The suggested improvements should e of great benefit and help in the production of a better effluent.

Lochore and Glencraig Special Drainage District.—This district is rovided with an efficient system of sewers. These discharge into four hannels on sloping ground at the side of the Fitty Burn. Here the ewage passes over rough stones which helps to break up the solids nd is discharged into the burn through two outlets. The question of anking the sewage before discharging into the burn is under considera- ion at present.

Kinglassie Special Drainage District.—This is a drainage district in ame only. The only public sewer is that laid to serve the Housing cheme. This discharges into a septic tank and the effluent into a mall ditch but is not very satisfactory and the ditch is again in need f cleaning out.

Practically all the drainage finds its way into the Lochty Burn which ows through the village. Septic tanks are provided in most cases here houses have modern conveniences.

I trust the provision of sewers in this District will be gone on with hortly as additional houses are being built, the drainage from which vill discharge into the Lochty Burn in front of houses at Burnside ottages, and without a drainage system it is impossible to call for the nstallation of water supply and modern conveniences.

Sanitary Conveniences.

Throughout all the Special Drainage Districts in this Area with the xception of Kinglassie all the houses with a few exceptions are pro- ided with inside water supply and a water-closet to every house. The ew exceptions are old houses which are not worth the expense involved n providing conveniences. In only a few instances does the water- loset serve more than one tenant.

Until Kinglassie Special District is provided with a drainage system othing can be done in the way of calling for the provision of inside vater supplies and water-closets.

Where privy closets are in use in nearly all cases there is one fo each tenant.

Rivers Pollution.

The main source of pollution of the River Ore, the Fitty Burn an the Lochty Burn is from domestic sewage. I made a special inspectio of the collieries in my district and in every case steps were being take to deal with the washery effluent and drip water from waggons.

As will be seen from my report on Auchterderran Drainage, step are being taken to improve the effluent from the works there and th County Engineer is considering the question of dealing with the sewag from Lochore and Glencraig Special District.

Schools.

There are eleven schools all within the Special Districts—four i Auchterderran, four in Lochore and Glencraig, one in Lumphinnans and two in Kinglassie. One of the schools in Kinglassie is an ol building and is only used for a few hours on two or three days per wee for special classes.

The schools and conveniences are all well kept.

At Auchterderran Higher Grade School the old type of closets in th Girls' convenience were taken out and fourteen modern closets sub stituted. At Auchterderran East School the boys' convenience wa altered. One of the entrances was built up and an inside wall in fron of the closets taken down. This prevents the children running throug the convenience and also gives the water-closets more light and ventila tion.

Common Lodging Houses.

There are no common lodging houses in this area. One house a Crosshill which was previously a lodging house, and which, at th beginning of the year had only a few lodgers, was converted into Billiard Saloon.

Miscellaneous.

Pithead Baths at Lumphinnans No. XI. Colliery were complete and put into operation during the year and baths at Glencraig Colliery which were constructed some years ago but never put in use, wer opened and have been well taken advantage of.

Housing.

At the end of the year the only habitable houses standing empt were at Lochore—ten of three apartments and fourteen of two apar ments. These houses, belonging to the Fife Coal Company, wer emptied when a scheme for the conversion of the two upstair house

to one four apartment house with scullery, bathroom, etc., was contemplated. Only one four-apartment house was, however, gone on with and the others will again be let to men in the employment of the Company.

There are comparatively few houses which can be classed as uninhabitable. Sub-letting which appears to be increasing, is, however, a serious problem as in the majority of cases the sub-tenant is unemployed and in many cases the tenant also. In the latter case the tenant is tempted to sub-let a room to enable him to pay his rent.

Sub-letting of houses, especially of two or three apartments, is most undesirable even if there is no actual overcrowding, but in most cases the houses are overcrowded. With no empty houses available and the fact that so many of the sub-tenants are unemployed it is almost impossible to deal with overcrowding. If action is taken and the nuisance abated it only means that the sub-tenant has removed into another room where the conditions may be no better, if not worse.

As mentioned in last year's report a complete census was taken of Lumphinnans Special District when it was ascertained that there were 138 sub-tenants of whom only 30 were in employment. Taking tenants and sub-tenants the census showed that 220 families were living in single apartments.

The question of the housing conditions in Cardenden was raised in the beginning of the year and in April I had a complete census taken of the Auchterderran Special District. The following are some of the particulars gathered from that census. There are 1,460 houses in the Special District—47 of one apartment, 808 of two, 479 of three, 95 of four and 31 of five apartments or over. The population was tenant families, 6,631 ; sub-tenant families, 419—a total of 7,050.

Of the tenants 1,020 were employed, 269 unemployed, 105 widows and 63 old age pensioners. There were 139 sub-tenants of whom 83 were employed, 34 unemployed and 22 widows or old age pensioners. Another point brought out regarding the sub-tenants was that 46 had previously had houses in Cardenden, 27 had come in from other districts and 66 had never been householders. Married sons or daughters constituted 43 of the sub-tneants and 15 were otherwise related to the tenants.

Including the 47 one-apartment houses and by reason of sub-letting of the other houses there were 232 families whose dwelling-house consisted of a single room.

Food Supply.

Milk.—The dairy premises in the Area are all well up to the standard and on the whole are kept in a cleanly condition but as I have said before the regular washing of hands and wearing of overalls do not receive as much attention as they should.

KIRKCALDY AREA—Andrew Stewart, Sanitary Inspector.

Water Supply.

The main sources of water supply for that part of Kirkcaldy District of Fife which comes under my jurisdiction are Glenfarg and the Wemyss Water Trust.

In the course of general inspections during the year dwelling houses without inside water supply were noted.

The only part of the Area where there are no standwells on the street is the village of Thornton. All the houses here have an inside water supply. The other Districts, namely, Coaltown of Balgonie, Milton of Balgonie, Balcurvie and Woodside are to a certain extent supplied by standwells on the street. At Prinlaws where the supply used to be from standwells, there are now very few owing to the introduction of inside water supply to the houses.

At the village of High Binn, Burntisland, as reported by me in my last Annual Report there has always been a great deal of trouble during the summer months with a shortage of water, more especially during the months of July and August when the village was full of visitors, sometimes as many as 1,200 to 1,300 visitors and only one tap running very slowly. The matter was taken up with the proprietors, The Whinnyhall Estate Co., and a meeting was held at High Binn with representatives of the Company when it was agreed that two storage tanks be built, one at The Common and one west from High Binn. After these were completed, at a cost of nearly £400, the village was well supplied with water.

During the excessive drought throughout the year the water supply was well maintained in all districts.

Drainage.

At Coaltown of Balgonie the conditions are still very unsatisfactory, nothing having been done yet to improve the sanitary conditions with regard to drainage. Twenty more new houses have been built by the County Council and at these, as was the case with the last twenty erected, a septic tank had to be built, the overflow finally entering the River Leven.

There are a number of houses in this village which are in all respects good houses with this exception, that they lack the necessary sanitary conveniences, which would bring them up to the modern standard of dwelling-houses.

Reports were submitted and inspections made regarding drainage for the village and it was hoped that the suggestion of a main sewer down to the sea, from Thornton, and a connection from the village of Coaltown down the River Leven to connect at the junction of the rivers would be proceeded with but up to the present the same state of matters exists—no drainage.

At Milton of Balgonie the same conditions exist as at Coaltown of Balgonie. Here there are eight houses in course of erection for the Fife County Council and the drainage from them will be to a septic tank and the overflow to the River Leven.

It is also proposed to connect up this village when the main sewer is laid to the sea.

Gray Park Drainage.—The drainage system is now working very satisfactorily. No trouble has been experienced during the year.

Thornton Drainage.—There is no improvement in the drainage in the village. During the year 54 houses were completed and tenanted and with this extra work put on the South Purification Works it has been a source of trouble to keep the tanks in working order. It is fortunate that we have had so little surface water to contend with during the summer. Since the last 54 houses were occupied on several occasions the works attendant has had to remain on duty all night in case the pumps would be put out of order. After the proposed 60 houses are built and tenanted should there still be no other outlet for sewage in the village, I am afraid that the trouble facing us will be terrible owing to the inadequate condition of the Purification Works.

If this new sewer were laid down the river to the sea it would greatly help the north end of Thornton as the main sewer is practically useless and the sewage runs crude into the River Lochty. This sewer could be put in order and carried right down the junction with the River Ore as owing to the lowness of the ground I do not think the north end sewage could be taken south.

Windygates and Balcurvie Drainage.—The system of disposal here is very unsatisfactory, and owing to the increased housing accommodation I am of the opinion that something will require to be done in the very near future. As the proposed sewer from Thornton to the sea passes this outlet, which is direct into the river, it could also be connected up the same as other places on the river. This is the worst system of sewage disposal in the Area.

Nuisances.

At Coaltown of Balgonie the same conditions exist as reported by me in my last Annual Report, that is, two open ditches where sewage runs and both are a great source of nuisance to the inhabitants residing in the vicinity. This source of nuisance only proves the necessity of having a proper drainage system laid down in the village.

Pollution of Rivers.

As reported in my last Annual Report the River Ore is greatly polluted by black dirty water from the coal washing plant at the Julian Pit belonging to the Balgonie Coal Company. During the year various inspections have been made by me and on several occasions

Dr. MacGillivray, Deputy Medical Officer, inspected the ditch and river. On any visit I always found the black dirty water running in large volume to the river. As long as there are no settling ponds at the pit this nuisance will continue.

On the River Lochty a farmer unintentionally poisoned a large number of trout by cleaning out an old disused pump well at his farm and allowing the contents to get access to the river. On finding out what had been done he compensated the Fishing Club by restocking the river with trout.

Housing (Rural Workers) Act, 1926.

Inspections of houses occupied by rural workers and others in the same economic position were carried out during the year. Plans were submitted in terms of the County Scheme in force under the above Act for the alterations and additions to 45 houses. The alterations and improvements carried out consisted of additions of sculleries, larders, coal cellars, etc., provision of bathrooms and inside water closets, increased lighting and ventilation, strapping and lathing of solid walls, replacing of brick or concrete floors with wooden floors properly under-ventilated, etc.

WEMYSS AREA—R. J. Wigston, Sanitary Inspector.

Water Supply.

Wemyss Area.—The Water Supply for the Wemyss Area is controlled by the Wemyss Water Trust and the supply during the year was sufficient for all domestic requirements, although owing to the exceptional dry summer the pressure had to be reduced during the autumn as a precautionary measure.

Scoonie Parish.—The water supply to Scoonie Parish is chiefly supplied from Leven Burgh, and while the exceptional drought of last year taxed the supply to its utmost, the action of Leven Town Council in tapping Teases Mine saved the situation and an adequate supply is now assured.

Boreland.—Boreland Special District is supplied direct from the Glenfarg Scheme of the County Council and the supply has been adequate during the year.

Drainage.

Kennoway.—The new drainage system at Kennoway was completed during the year and the whole of the village is now served with an adequate sewer, but regarding this matter I regret that the new system was not extended to include Baintown. I understand the chief reason why it was not carried out was on account of the high cost of the work and the low valuation of the property the sewer would serve,

but notwithstanding, I think at this time of day that some method should be evolved to overcome difficulties of this kind, more especially as I do not think there is a better building site in Fife than at Baintown, from where Edinburgh and North Berwick are easily discernible.

Scavenging.

East and West Wemyss, Coaltown of Wemyss and Methilhill.—The scavenging arrangements in the above Special Districts are satisfactory in so far that all the refuse is collected by motor lorry every other day and taken to the common depot situated at the north of the L.N.E. Railway Branch at East Wemyss.

I have already drawn attention to the unsatisfactory condition and position of this depot and during the year I had to again cut off the tip from the Railway by means of digging a trench from two to three feet deep and filling up with clay to prevent fire reaching the railway.

During the year along with Convener Moyes of the District Council I endeavoured to get another site for a refuse depot, but without success and I was thereupon asked to prepare a preliminary report on disposal by incineration and controlled tipping. Subsequently the Medical Officer of Health was informed that a site at Earlseat Mine would be made available for the refuse tip and after enquiry by a Special Sub-Committee of the County Council I was instructed to prepare a report dealing with the question of disposal by incineration at a site near East Wemyss as compared with controlled tipping at the site at Earlseat Mine. This question is now having my attention.

Sanitation.

Kennoway.—During the year considerable progress has been made with the supply of sanitary fittings, etc., within this district and up to date approximately 50 properties comprising 70 houses or thereby have been provided with the necessary sanitary conveniences.

West Wemyss.—At West Wemyss the houses requiring conveniences are reported upon under Housing, and no cases under this heading only have been found at Methilhill or Coaltown of Wemyss.

Housing.

Special surveys and inspections of property were made within all the Special Districts in order to ascertain (1) insanitary property, (2) overcrowding and (3) sub-letting and these reports were forwarded to the Medical Officer of Health.

Following upon the above inspections, plans for reconstruction of 21 houses at East Wemyss have been approved, but owing to the difficulty of rehousing the people out of the insanitary property, operations are meantime held up.

At West Wemyss 5 houses have been completed under the Housing (Rural Workers) Act, and an additional 18 houses are at present being reconstructed.

Methilhill.—The houses within Methilhill district are all in a good state of repair and are also well provided with sanitary conveniences.

Coaltown of Wemyss.—The properties at Coaltown of Wemyss are also satisfactory.

There are no clearance of improvement areas within the Wemyss Area. Regarding overcrowding special inspections were made in connection with the five year plan and a report under this heading was submitted to the Medical Officer of Health.

Housing (*Rural Workers*) *Act*, 1926.—During the year 19 houses were reconstructed under the above Act.

Meat.

In this connection I wish to point out that not a single cow has been slaughtered at either the Leven Slaughterhouse or East Wemyss, and the quality of cattle killed is of a very high standard. An enquiry into the method of meat inspection at Leven was held in November at which Dr. G. Pratt Yule, Dr. McGillivray and also Dr. Balfour Graham, Leven, along with the Public Health Committee of Leven Town Council were present. After the Superintendent and myself as Detention Officer had been questioned regarding the procedure, Dr. Yule stated that in his opinion we were carrying out the duties as required by the Department of Health. After the enquiry, however, I obtained the permission of the Provost and Convener of Leven Town Town Council to engage Mr. Sime, Veterinary Surgeon, Leven, for one month to inspect all carcases within the Slaughterhouse and I herewith append a copy of his certificate covering the period of his inspections.

Lemon Terrace,
Leven, *3rd March*, 1934.

Robt. J. Wigston, Esq.,
Sanitary Inspector, Leven.
" Dear Sir,

Meat Inspection—Leven Slaughterhouse.

I refer to our conversation on the 30th November last regarding the inspection of carcases at Leven Slaughterhouse and as requested by you I have to report that I made numerous visits to the Slaughterhouse during the month of December and also until the 9th January, and have to state that on all my visits I found everything in order and all the carcases examined by me were in first class condition. The only portion which I discovered to be unfit for the food of man was the liver of a bullock which had previously been seized by Lumsden, the Slaughterhouse Superintendent."

I am,
Yours faithfully,
(Sgd.) WALTER SIME, M.R.C.V.S.

CUPAR AREA—Marshall Gorrie, Sanitary Inspector.

Water Supplies.

Pitlessie Special Water District.—In consequence of the excessive drought experienced during the spring, summer and autumn months of the year, which caused a general shortage of water supplies throughout the whole country, the supply to this village became somewhat short, necessitating the shutting off of the supply during the night from 6 p.m. to 6.30 a.m. from 26th August to 24th September, five weeks in all, but apart from this and notices sent to each householder warning them of shortage and calling for their co-operation in preventing waste, the supply was satisfactorily maintained throughout the whole year.

The whole of these works are at present in first class order and receive good attention from the water officer, both in the resurfacing of the filter with sand, scouring of the mains and general orderliness of the several works.

Strathmiglo Special Water District.—The village of Strathmiglo is the largest in Cupar Area and has a good gravitation water supply. The source of the supply is from " Glenvale," 3½ miles distant from the village, and the works include intake storage tank of 3,475 gallons capacity, two sand filters and auxiliary storage reservoir of 25,900 gallons capacity for filtered water.

The supply during the year to this village despite the long dry spring, summer and autumn months when water supplies throughout the whole country suffered severely, was adequately maintained.

Ten new connections were made to the water mains during the year, making a total of 120 connections since the scheme was introduced nine years ago.

Balmblae, Falkland Special Water District.—The special service of water to the inhabitants of this area comprising thirty or so dwelling-houses is by a pipe of small dimensions connected to the street pillar well. For this privilege the Town Council of Falkland, who provide the supply, are paid £8 per annum by the County Council.

In view of the present system of supply being inconvenient, and repeatedly complained of by the inhabitants, the County Council have been urged to lay down a two-inch water main to enable a connection being obtained for individual dwelling-houses.

While the houses in this area are all more or less in a defective condition and assessable rentals very low, there is little hope of improving their condition by partial reconstruction or reconditioning by means of financial assistance granted to owners under the Housing (Rural Workers) Act, 1926, until adequate sewage and water supply schemes are available.

Kettle Special Water District.—The gravitation supply of water introduced into this Special District in the year 1908 and augmented in 1922, serves the needs of four villages, viz :—Kettle, Kettlebridge, Balmalcolm and Newton of Falkland. The supply is stored in an underground reservoir of 100,000 gallons capacity, located in the area, " Balreavie Den " adjacent to the town of Falkland.

The whole of the works are in a good state of repair, but on 8th August of the year under review, the water in storage tanks became so low that it was found expedient to replenish same by hose pipe from an adjacent burn, and this was continued until 27th September when the inflow to the tank increased in volume sufficient for the needs of the district, but did not reach its normal until February of this year (1934).

A sample of water submitted for analysis while burn water was being led into storage tanks to temporarily augment public supply was reported upon by the Analyst " that Chemical analysis of the water was satisfactory and that same was fit for drinking and domestic purposes."

Visits were made to business premises requiring a large supply of water, and householders warned of the shortage of supply and need for economy in use, and prevention of waste. With these precautions, the supply throughout the District was maintained continuously.

Dunshalt Special Water District.—Since inauguration of a new scheme of water supply to this village on 2nd July 1932, the supply has been abundant and of good quality.

Throughout the year 1933, which was reckoned to be the longest period of dry weather ever known extending as it did from early spring to late autumn, the supply remained abundant and the reservoir at the Marle Pit overflowing.

Since introduction of the water supply, improvements to dwelling-houses were numerous, grants towards same being obtained from the County Council in terms of the Housing (Rural Workers) Act, 1926.

No bursts or leakages occurred in the water mains during the year and no maintenance was necessary excepting minor repairs to wells. The works generally are in good order with 38 connections from mains to private dwelling-houses.

Water Supplies other then Special Water Districts.

Freuchie Water Supply.—This large village has a gravitation water supply which is owned and managed by the villagers privately. The underground storage tanks, water mains, etc., are all attended to by the local water officer and received good attention. No shortage of supply was reported to me during the year under review.

Gateside Water Supply.—Gateside has a privately-owned gravitation supply of water which appears sufficient meantime to serve the

needs of the village. No complaints of shortage were received during the year.

In my opinion, this scheme of supply would receive more satisfactory attention if the village was formed into a Special Water District and the works taken over by the County Council.

Chance Inn Water Supply.—The supply here was augmented during the year under review and continues satisfactory.

Special Drainage Districts.

At present there are five Special Drainage Districts in Cupar Area of this County, viz. :—Freuchie, Kettle, Springfield, Newton of Falkland and Balmblae, while in one only of these villages, viz.:—Freuchie, there is at present a sewerage system.

While the need for sewers is not meantime urgent for the village of Springfield, there is necessity for same in Kettle, Newton of Falkland and Balmblae. The question of forming a special drainage district in Strathmiglo is in abeyance meantime.

The sewers in Freuchie continue in a satisfactory condition. The works, which have now been in operation for twenty-three years are in a satisfactory condition.

Considerable progress is being made in the introduction of water supply and sinks to farm cottages and other dwellings throughout the District, also provision of water-closets in lieu of privies.

Seasonal Workers.

Six intimations of arrival of seasonal workers were received and dealt with during the year. In most cases, these were Irish workers employed in potato lifting, dressing, etc.

Four notices were sent to the farmers directing attention to requirements of the Bye-laws and stating the number of workers to be housed on the premises.

In most cases reasonable arrangements were made by the farmers for accommodation of these workers and the Regulations complied with.

While difficulty is still experienced in getting farmers to realise their obligations to make premises allocated for accommodation of potato workers conform to Bye-laws, better results are now being obtained.

Slaughterhouses.

There are 20 licensed slaughterhouses in Cupar Area, 12 licensed by Town Councils, viz :—Cupar 6, Ladybank 1, Newburgh 3, Falkland 1, Auchtermuchty 1, and 8 by the County Council, viz :—Ceres 1, Kettle 2, Auchtermuchty 1, Freuchie 1, Strathmiglo 1, and Cupar Muir 2.

The arrangements made for systematic inspection of meat on the licensed days and hours of slaughter, as re-adjusted, now meet as far as is reasonably possible with requirements of the Public Health (Meat) Regulations (Scotland) Order 1924.

Arrangements now in force work satisfactorily during the cooler months of the year, but during summer, deviation is allowed in consequence of the difficulties arising both in the sales and in maintaining the freshness in the meat.

In such circumstances all cases of Emergency Slaughter are duly notified prior to slaughtering taking place and inspection of carcases made before sale to the public. One hundred and forty emergency slaughters were notified during the year.

Dairies, Cowsheds and Milkshops.

There are 64 registered milk sellers in this Area, 54 of whom are cowkeepers in the County Area and 10 in the Burghs. Twenty-two persons are registered to sell " Sterilised Milk " in sealed bottles and two to retail " Certified Milk " under the Milk (Special Designations) Order (Scotland) 1930.

The dairy farms in the Area on the whole are in a fairly satisfactory state but much still requires to be done to bring the structural conditions of these premises to conform to the requirements of the Dairy Bye-laws, chiefly in the provision of more efficient lighting and ventilation and in impressing on the milk producers the standard of cleanliness to be observed both as regards premises and stock and in the handling of the milk.

Schools.

Ceres School.—I would direct attention to the unfinished and insanitary state of the children's lavatories at this school. Two years ago arrangements were made for the conversion of these dry lavatories to the modern water carriage system of lavatories but work then started has been left incomplete.

New Buildings.

The schemes for provision of new houses in Cupar Area to meet with the requirements of population and others being dishoused owing to their houses being dealt with under the Housing Acts, as uninhabitable, have occupied the minds of the County Council during the year both as regards the completion and occupation of those being built and the necessity of proceeding without delay with additional ones.

Of the 132 houses recommended in December 1930, as necessary to supply the needs of inhabitants of 19 villages, a preliminary revised

instalment of 60 was recommended in April of 1931, but not till 1932 did building operations begin and up to date, 34 new houses have been built of which 28 are now completed and occupied and 6 nearing completion.

While this instalment of new houses has somewhat helped to mitigate the demand there is now much more pressing need to proceed with erection of new houses to meet demand of families being dishoused from both defective and uninhabitable houses.

Synopsis of number of houses improved in terms of the Housing (Rural Workers) Act Scheme of grants since its commencement in 1928 :—

Year.	No. of Applications. Received.	No. of Applications. Approved.	Disapproved.	No. of Houses.
1928	11	7	4	15
1929	28	27	1	28
1930	29	26	3	72
1931	28	25	3	68
1932	42	39	3	81
1933	31	26	5	52
	169	150	19	316

From the above list of houses reconditioned it can be seen that the Housing (Rural Workers) Act Scheme is being widely taken advantage of by owners of property scattered throughout the area. The owners are quick to realise the value of this scheme and the advisability of having their properties brought up to standard. The scheme does not only allow of farm or rural cottage improvements but encompasses improvements to houses in the various villages provided the economic position of the occupant is on a parallel with that of an agricultural worker. While the County Council are pressing owners to modernise their property they are also bringing to their notice the terms of this grant scheme which allows, of course, the owner to carry out more extensive and complete improvements than he could otherwise have done had no grant been awaiting him.

Before improvements are started on some of the houses it would seem to an onlooker that it was hardly worth beginning to but when the improvements are completed the house provided with wood floor, plastered walls, additional lighting together with internal sanitary fittments, the expenditure involved is indeed entirely justifiable. As I have said the requirements of the scheme are now becoming more widely known and I hope that they will yet be more widely taken advantage of as much of the older property in villages together with farm cottages still require attention.

ST. ANDREWS AREA—Robt. Just, Sanitary Inspector.

Water Supply.

Owing to the abnormally dry summer the water supplies in the District were severely taxed, and in some cases in Special Districts it was only with great difficulty that the supply of water was maintained. It is evident that the consumers in the rural areas make more endeavour, when necessary, to conserve the supply than in townships, and it was only by their efforts during the summer months that a more serious situation was averted.

Leuchars Special Water District.—The supply to the village of Leuchars which is pumped by mechanical aid from springs to a reservoir on the high ground to the north of the village, calls for no special comment. Throughout the summer drought the yield from springs was equal to the demand. The pumping plant and works generally have been efficiently maintained.

Guardbridge Special Water District.—This supply, which is obtained from the higher ground at Balmullo, where the reservoir and filters are situated, flows by gravitation to the village. Owing to the very dry summer and to the consequent small yield of water from the springs towards the end of June a shortage of water became apparent. For a time the supply was maintained by turning off the water during the night hours, but owing to the continued absence of rain the reservoir ultimately became dry. Water had then to be pumped from the Mill Pond into the Special District Mains. The pumping of unfiltered water from the Mill Pond cannot be recommended, although hand bills were distributed to every householder recommending the boiling of the water before being used for drinking purposes. This matter was brought to the notice of the Local Authority and I am pleased to be able to report that the services of a Water Diviner were obtained and water was located in three places in the neighbourhood of the gathering ground at Cuplahills and a site for a bore was chosen. At the time of writing arrangements are being made for boring to be carried out, and it is hoped with successful results.

Thanks are due to the Guardbridge Paper Company for placing the pumping plant and other facilities at the disposal of the Local Authority and thereby maintaining a supply of water to Guardbridge Village even although water for trade purposes, at the time, was not to abundant.

Schools.

No complaints have been received in the course of the year. On the other hand it is gratifying to be able to record that the sanitary conditions of the schools continue to improve. At Strathkinness, Cameron and Balmullo Schools water-closets and urinals with the necessary drainage were substituted for the former dry closets.

Dairies.

Within the year under review additions and improvements have been carried out to dairy premises at West Balrymonth, Stravithie Mains and Southfield Farm, Leuchars.

Following upon a survey of the dairies in the District intimation was sent to dairymen, where necessary, with a view to improving their premises in accordance with the Bye-laws framed in terms of the Milk and Dairies (Scotland) Act 1914. At ten dairy farms improvements have been carried out. At two farms, part of the improvements have been carried out and arrangements have been made for the completion of improvements in the summer months when the cows are on the grass. At other two dairy farms plans of proposed improvements have been approved of by the Local Authority.

ANSTRUTHER AREA—John Ross, Sanitary Inspector.

Water Supplies.

Quality and sufficiency—Owing to the formation of St. Monance into Burgh the number of Special Water Districts in the Area has been reduced to three. These districts are—Colinsburgh, Largo and Largo-ward.

The past year (1933) has been a testing one in the matter of water supplies. The abnormally dry weather caused many supplies to be reduced to such extent that, reluctantly, the only measure available to preserve the supply, namely, curtailing the hours during which the supply was available, had to be taken.

Fortunately Colinsburgh was not adversely affected.

Improvements in this supply appear, nevertheless, to be desirable.

Largo.—The District in this Area most seriously affected by the abnormal spell of rainless weather was Largo. For some time past the water supply of this District has been the subject for considerable consideration by the Committee. In 1932, it may be remembered, the maximum depth to which the level of the water in the reservoir fell below the top sill level was 13 ft. 7½ in. This was on the 29th September of that year. This year (1933), however, conditions were very much worse, the water level on 19th September, 1933, falling to a maximum depth of 21 ft. 6 in. below top sill level. That the position was a critical one will readily be appreciated when it is realised that the capacity of the reservoir is only 474,000 gallons at a depth of 15 ft. below top sill level. Below this depth I have no figures of its capacity for varying levels, but, since for every foot of fall from 10 ft. to 15 ft. the capacity is reduced on an average by 133,000 gallons it will be very apparent that its contents at a depth of 21 ft. 6in. must have been an extremely low one, and quite inadequate to meet requirements let alone permit of any safety margin for use in outbreak of fire. This situation

was reached despite the fact that considerable measures to economis the supply had been taken in curtailing the supply during certain hour On 28th August, 1933, the water was shut off daily from 6 p.m. to 7 a.m and on 5th September it was shut off from 2 p.m. to 8 a.m. Fu supply was only restored on 25th September, but, unfortunately th supply used exceeded the supply being delivered to the reservoir t such extent that on 5th October the supply was again shut off dail from 2 p.m. and on 8th October it was shut off daily from 6 p.m.

Every possible means of increasing the supply are being investigate and while this could be attained by increased storage the costs of th measure are considerable. Alternative measures are therefore beir considered.

Largoward.—Anxiety was also felt regarding the adequacy of th supply to withstand the trying conditions experienced during the yea The springs which feed the supply were seriously affected and muc more water was being used than they were delivering at one perio This fact, together with the inevitable depreciation, under such cond tions, of the water in the storage tanks, resulted in curtailing the supp being necessary to cope with the position and to preserve the availab supply.

Drainage System.

Efficiency.—Since St. Monance became a Burgh the Draina Districts in the Area have been reduced to two. These are Colinsbur and Largo. Detailed particulars of these Districts have been furnish in a previous report and as no alterations have been made in t systems since, further description of them in this report is not co sidered necessary. Both systems have worked sarisfactorily througho the year.

Sewage Purification and Disposal.—Methods and and Efficiency. The disposal of the sewage from the Colinsburgh Drainage District effected by its discharge from the 12-inch outfall sewer into a strea situated about 1,150 feet to the south of the Main Street in the Villa No purification takes place prior to its discharge, and no complai regarding the system have been made during the year.

Where sanitary fitments are provided in properties outwith Draina Districts, disposal of the sewage from them is effected by means septic tanks, the effluent from which discharges into some convenien situated and satisfactory field, drain, ditch, or is allowed to percol through the soil. In all these cases every possible precaution is tak to prevent pollution of any stream or other source of domestic wa supply, and in this connection the approval of the work is not held prejudice the Council in calling for an alternative system for t disposal of the sewage in the event of any nuisance resulting from t system projected.

Offensive Trades.

Apart from the three private slaughterhouses in the Area there are o other Offensive Trades conducted. No complaints were received uring the year regarding any of these slaughterhouses, and the business onducted in them is satisfactorily executed.

Schools.

In previous reports I called attention to the fact that 30 per cent. of he schools in the area were not provided with modern sanitary fitments. t is regrettable to report that the situation to-day is no better.

Infectious Diseases.

Regarding the disinfection of premises where cases of infectious isease occurred the methods now adopted follow entirely new lines. his follows the evidence which considerable research into the occurence of these diseases revealed. The organisms or germs which give ise to these specific diseases are shown to have a particularly low itality outside the human body ; that they are incapable of surviving or any long period in inanimate objects ; and that when the person uffering from the disease has been removed to the isolation hospital he danger of spreading the disease from that case has been removed—nfection being, it is stated generally due to contact with an infected erson. In the light then of this research work and subsequent to nquiries into and an investigation of the uses of disinfectants in the ounty, the County Medical Officer issued instructions to Sanitary nspectors regarding disinfection in general. Briefly, the measures now aken are—urging upon the householder of premises in which infectious isease occurred that cleanliness and abundance of fresh air are much ore effective disinfectants than their reliance upon the spraying with disinfectant of the rooms, etc. Accordingly each householder is equested, after removal of the patient, to thoroughly clean out the oom—treat it as if being spring cleaned, to wash all woodwork with oap and water ; to wash also with soap and water, all articles in the oom which can be washed, and to open and keep open for long periods, ll windows so that an abundance of fresh air may freely circulate hroughout the premises. In certain cases where it is doubtful if these easures would be effectively carried out or where the premises are ept in a dirty condition, the spraying of a disinfecting solution is dopted with the object of creating conditions which will, of necessity, equire cleansing of the apartment to be subsequently carried out by the ouseholder. These precautionary measures have been adopted in the rea and it is interesting to note that few repeat cases of infection ccurred. In the cases where subsequent cases did arise, these occurred ithin the period of incubation of the particular disease and in house-olds where the children were not readily isolated. Such cases would,

doubtless, have arisen whether the apartment had been disinfected or not. This indicates that the measures adopted are satisfactory. They also, however, serve to focus upon the early removal, or isolation, of patients. Since spread of infection is largely to be attributed to contact with infected persons it is of primary importance that all such persons should be speedily removed to the isolation hospitals, or isolated in their homes, where this measure can satisfactorily be carried out.

Food Supply.

Milk.—Every opportunity is taken to encourage cleanliness in all stages of supply from production to distribution. The factor of cleanliness is an all important one in milk production, handling, and distribution and too much stress cannot be laid upon it. There are still a considerable number employed in the industry who do not yet realise the important part which cleanliness plays in the work, but on the other hand there are many who do and who carry out all stages of the work in a thoroughly satisfactory manner.

There were at the close of the year nine holders of licences under the Milk (Special Designations) Order 1930, being an increase of 2 in the number for the previous year. Of these nine, six are in respect of premises where Grade A Milks are produced and three are in respect of premises where Designated Milks are retailed.

Sterilising chests were fitted up in a number of these premises during the year and mark a very important step in producing these milks under almost ideal conditions. The importance of sterilising dairy utensils will readily be understood from the results which followed experiments carried out by the East of Scotland College of Agriculture:

Utensils washed only contained 23,000 bacteria per c.c.
Utensils washed and scalded contained 700 bacteria per c.c.
Utensils washed, scalded and sterilised contained only 2 bacteria per c.c.

Milk therefore placed into these utensils after treatment as above described was subject to contamination with bacteria to the amount indicated. In addition to milk in premises where sterilising is undertaken being much cleaner its keeping qualities are considerably greater. The experiments showed that the keeping qualities of milk in vessels that had been washed only was 1 to $1\frac{1}{2}$ days ; the keeping qualities of milk in vessels which had been washed and scalded was 2 to $2\frac{1}{2}$ days and the keeping qualities of milk in vessels which had been washed scalded and sterilised was $2\frac{1}{2}$ to $3\frac{1}{2}$ days.

The effect of temperature on the multiplication of bacteria in milk is an important one, and the use of warm milk cannot be too strongly discouraged owing to its temperature being favourable for growth of bacteria. Cooling of milk immediately after production should be undertaken and the temperature to be aimed at is 50°F. That milk

cooled to low temperatures retard the growth of bacteria may readily be seen from the following table :—

Temperature.	Bacteria per c.c.		
	Fresh Milk.	After 24 hours.	After 48 hours.
40/F	4,290	4,140	4,570
50/F	4,290	14,000	128,000
60/F	4,290	1,590,000	33,000,000

It is generally found that Bye-law 23, which prohibits dry fodder being given to cows during milking, is adhered to ; that Bye-law 24 regarding cleansing, sweeping and dusting operations immediately before or during milking is also observed. Bye-law 30, dealing with overalls, is not generally adopted. In view of the fact that dairymen are not in possession of a copy of the dairy bye-laws it is not surprising to find that the requirements of these are not observed. I consider that by issuing to each dairyman a copy of the Bye-laws very considerable progress would be made in the direction referred to under this heading.

There are, so far as known, six non-registered premises in the area in which approximately 29 cows are housed.

Sale of Food and Drugs Acts.

During 1933, eight hundred and sixty-nine samples of food and drugs were taken by the County Sampling Officers, under my direction as Chief Sampling Officer, and analysed by the County Analyst. Of these, eight hundred and twenty-six were official samples and forty-three were test samples. On analysis, thirty-seven official samples and one test sample were found not to be of the nature and substance of the article demanded. The nature and number of the adulterated official samples were sweet milk, 23 ; mince, 13 ; sausage roll, 1.

Of the vendors of the thirty-seven adulterated official samples, seventeen were fined in sums varying from 20/- to £5, a total of £36 ; ten cases were dropped on payment of expenses varying from 30/- to £2, a sum of £19 in all ; in one case, after appeal to the cow, proceedings were dropped on payment of £2 to expenses ; in three cases no proceedings were taken ; four vendors were warned ; two vendors were found not guilty.

The following table sets forth the work undertaken under the Acts by the Sampling Officers :—

Area.	Official Samples.		Test Samples.		Total.
	Total Samples.	Adulterated Samples.	Total Samples.	Adulterated Samples.	
Cupar Area	38	2	1	—	39
Burghs in Cupar Area ..	134	5	1	—	135
St. Andrews Area ..	12	—	—	—	12
Burghs in St. Andrews Area	120	2	1	—	121
Anstruther Area ..	37	3	—	—	37
Burghs in Anstruther Area	39	—	—	—	39
Kirkcaldy Area ..	13	2	4	—	17
Burghs in Kirkcaldy Area	107	3	—	—	107
Wemyss Area ..	34	4	—	—	34
Burghs in Wemyss Area	65	6	—	—	65
Lochgelly Area ..	83	2	—	—	83
Burghs in Lochgelly Area	25	1	—	—	25
Dunfermline Area ..	82	4	—	—	82
Burghs in Dunfermline Area	23	1	—	—	23
Beath Area	6	1	6	1	12
Burghs in Beath Area ..	8	1	30	—	38
Total	826	37	43	1	869

Tables of Samples and Results of their Analyses.

CUPAR AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	10	2	12	1	..	1
Brisket, Pressed,	1	..	1			
Butter, ..	2	..	2			
Butter, Fresh, ..	1	..	1			
Cake, Sponge, ..	1	..	1			
Chicken Roll, ..	1	..	1			
Cream, Sterilised	1	..	1			
Cup Chocolate, ..	1	..	1			
Farola, ..	1	..	1			
Magnesia, Bis-urated, ..	1	..	1			
Marmalade, ..	1	..	1			
Meat Roll, ..	1	..	1			
Mince, ...	2	..	2			
Peaches, ..	1	..	1			
Peas, Tinned, ..	2	..	2			
Powder, Baking,	1	..	1			
Salts, Health, ..	1	..	1			
Sausages, ..	4	..	4			
Tea, ...	2	..	2			
Tomato Puree, ..	1	..	1			
Total, ..	36	2	38	1	..	1

The above noted adulterated samples of Sweet Milk contained the following :—

Fat. per cent.	Non-Fatty Solids per cent.
2·35	8·51
2·57	9·15

AUCHTERMUCHTY BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	7	..	7	*Nil.*		
Acid, Tartaric, ..	1	..	1			
Cake, Sponge, ..	1	..	1			
Chocolate, ..	1	..	1			
Ginger, Ground,	1	..	1			
Jelly, Apple, ..	1	..	1			
Lemon Cheese, ..	1	..	1			
Mince, ..	1	..	1			
Mustard, ..	1	..	1			
Peel, Cut, ..	1	..	1			
Sausages, ..	3	..	3			
Tartar, Cream of,	1	..	1			
Total, ..	20	..	20			

CUPAR BURGH.

OFFICIAL.

	Gen.	Adult.	Total.
Sweet Milk, ..	23	1	24
Skimmed Milk, ..	3	..	3
Butter, ..	1	..	1
Cinnamon, ..	1	..	1
Dripping, ..	1	..	1
Ginger, Ground,	1	..	1
Ginger, Stem, ..	1	..	1
Mince, ...	1	1	2
Peel, Lemon, ..	1	..	1
Sauce, ...	1	..	1
Sausages, ..	2	..	2
Tartar, Cream of	1	..	1
Total, ..	37	2	39

The above noted adulterated sample of Sweet Milk contained 2·74 per cent. of Fat and 8·91 per cent. of Non-Fatty Solids.

TEST.

	Gen.	Adult.	Total.
Lime Cordial, ..	1	..	1
Total, ..	1	..	1

FALKLAND BURGH.

OFFICIAL.

	Gen.	Adult.	Total.
Sweet Milk, ..	7	..	7
Broth Cubes, ..	1	..	1
Butter, Salt, ..	1	..	1
Cheese, ..	2	..	2
Coffee Essence ..	1	..	1
Cornflour, ..	1	..	1
Jelly Cream, ..	1	..	1
Pepper, ..	1	..	1
Rice, Ground, ..	1	..	1
Sausage Meat, ..	1	..	1
Sausages, ..	3	..	3
Tartar, Cream of,	1	..	1
Tea, ...	1	..	1
Total, ..	22	..	22

TEST.

	Gen.	Adult.	Total.
Nil.			

LADYBANK BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total.
Sweet Milk, ..	9	..	9	*Nil.*		
Beer, ...	1	..	1			
Butter, Salt, ..	1	..	1			
Cheese, ..	1	..	1			
Lentils, ..	1	..	1			
Mincemeat, ..	1	..	1			
Pickles, ..	1	..	1			
Rennet, ..	1	..	1			
Rum, Diluted, ..	1	..	1			
Sausages, ..	1	..	1			
Sausagemeat, ..	1	..	1			
Spirits, Diluted,	1	..	1			
Stout, ...	1	..	1			
Sweets, ..	1	..	1			
Tartar, Cream of,	1	..	1			
Tea, ...	1	..	1			
Tongue, ..	1	..	1			
Total, ..	25	..	25			

NEWBURGH BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total.
Sweet Milk, ..	8	3	11	*Nil.*		
Butter, Salt, ..	1	..	1			
Lemon Curd, ..	1	..	1			
Lobster Paste, ..	1	..	1			
Mince, ...	1	..	1			
Oatmeal, ..	1	..	1			
Oats, ...	1	..	1			
Powder, Lemon,	1	..	1			
Salts, Epsom, ..	1	..	1			
Sausages, ..	5	..	5			
Sausage Roll, ..	1	..	1			
Syrup, ..	1	..	1			
Tapioca, ..	1	..	1			
Tartar, Cream of,	1	..	1			
Total, ..	25	3	28			

The above noted adulterated sample of Sweet Milk contained the following :—

Fat. per cent.	Non-Fatty Solids per cent.
2·77	8·57
2·86	8·60
2·42	8·79

ST. ANDREWS AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	2	..	2	*Nil.*		
Butter, ..	1	..	1			
Cocoa, ...	1	..	1			
Cornflour, ..	1	..	1			
Farola, ..	1	..	1			
Flour, ..	1	..	1			
Oatmeal, ..	1	..	1			
Semolina, ..	2	..	2			
Sugar, ...	1	..	1			
Tartar, Cream of,	1	..	1			
Total, ..	12	..	12			

NEWPORT BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	17	1	18	*Nil.*		
Butter, ..	1	..	1			
Cocoa, ...	1	..	1			
Creamola, ..	1	..	1			
Margarine, ..	1	..	1			
Oatmeal, ..	4	..	4			
Powder, Baking,	1	..	1			
Rice, Ground, ..	3	..	3			
Rice, Whole, ..	4	..	4			
Sausages, ..	2	..	2			
Sugar, ...	5	..	5			
Tea, ...	2	..	2			
Total, ..	42	1	43			

The above noted adulterated sample of Sweet Milk contained 2·89 per cent. of Fat and 8·96 per cent. of Non-Fatty Solids.

ST. ANDREWS BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	26	1	27	Sweet Milk, ..	1	..	1
Butter, ..	1	..	1				
Margarine, ..	1	..	1				
Oatmeal, ..	2	..	2				
Rice, Ground, ..	4	..	4				
Rice, Whole, ..	3	..	3				
Sugar, ...	3	..	3				
Tea, ...	2	..	2				
Total, ..	42	1	43	Total, ..	1	..	1

The above noted adulterated sample of Sweet Milk contained 3·36 per cent. of Fat and 8·02 per cent. of Non-Fatty Solids.

TAYPORT BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	7	..	7	*Nil.*		
Bospur Gravy Powder, ..	1	..	1			
Cinnamon, Ground,	2	..	2			
Farola, ..	1	..	1			
Mustard, ..	1	..	1			
Oatmeal, ..	3	..	3			
Pepper, Black, ..	1	..	1			
Rice, Ground, ..	5	..	5			
Rice, Whole, ..	5	..	5			
Semolina, ..	2	..	2			
Sugar, ...	3	..	3			
Tea, ...	3	..	3			
Total, ..	34	..	34			

ANSTRUTHER AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	9	1	10	*Nil.*		
Butter, Salt, ..	2	..	2			
Cheese, ..	1	..	1			
Cocoa, ...	2	..	2			
Cornflour, ..	2	..	2			
Farola, ..	1	..	1			
Jam, Raspberry,	1	..	1			
Lemon Curd, ..	1	..	1			
Marmalade, ..	1	..	1			
Mince, ...	..	2	2			
Mustard, ..	1	..	1			
Oatmeal, ..	1	..	1			
Ovaltine, ..	1	..	1			
Porridge Oats, ..	1	..	1			
Rice, ...	1	..	1			
Sausages, ..	1	..	1			
Semolina, ..	2	..	2			
Sugar, ...	2	..	2			
Tea, ...	4	..	4			
Total, ..	34	3	37			

CRAIL BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	6	..	6	*Nil.*		
Butter, Salt, ..	1	..	1			
Semolina, ..	1	..	1			
Tea, ...	1	..	1			
Total, ..	9	..	9			

ELIE AND EARLSFERRY BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total.
Cocoa, ...	1	..	1	*Nil.*		
Cornflour, ..	1	..	1			
Creamola Custard,	1	..	1			
Force, ...	1	..	1			
Oatmeal, ..	1	..	1			
Rice, Ground, ..	1	..	1			
Rice, Whole, ..	2	..	2			
Sago, Brown, ..	1	..	1			
Semolina, ..	1	..	1			
Sugar, ...	1	..	1			
Tea, ...	1	..	1			
Total, ..	12	..	12			

ANSTRUTHER-KILRENNY BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total.
Sweet Milk, ..	1	..	1	*Nil.*		
Butter, Fresh, ..	1	..	1			
Butter, Salt, ..	1	..	1			
Cocoa, ...	1	..	1			
Cornflour, ..	2	..	2			
Custard Powder,	1	..	1			
Margarine, ..	1	..	1			
Marmalade, Pine-apple, ..	1	..	1			
Rice, Ground, ..	2	..	2			
Tea, ...	3	..	3			
Total, ..	14	..	14			

PITTENWEEM BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total.
Lentils, ..	1	..	1	*Nil.*		
Oats, Breakfast,	1	..	1			
Semolina, ..	1	..	1			
Tapioca, Flaked,	1	..	1			
Total, ..	4	..	4			

KIRKCALDY AREA

LANDWARD.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	5	1	6
Mince, ...	3	1	4
Sausages, ..	2	..	2
Sausage, Stewed,	1	..	1
Total, ..	11	2	13

The above noted adulterated sample of Sweet Milk contained 2·82 per cent. of Fat and 8·69 per cent. of Non-Fatty Solids.

Test.	Gen.	Adult.	Total.
Sweet Milk, ..	4	..	4
Total, ..	4	..	4

BURNTISLAND BURGH.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	39	1	40
Skimmed Milk, ..	4	..	4
Pasteurised Milk,	1	..	1
Butter, ..	2	..	2
Mince, ...	1	..	1
Total, ..	47	1	48

The above noted adulterated sample of Sweet Milk contained 3·30 per cent. of Fat and 8·06 per cent. of Non-Fatty Solids.

Test.	Gen.	Adult.	Total.
Nil.			

KINGHORN BURGH.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	3	..	3
Pasteurised Milk,	1	..	1
Butter, ..	2	..	2
Sausage, ..	1	..	1
Total, ..	7	..	7

Test.	Gen.	Adult.	Total.
Nil.			

LESLIE BURGH.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	42	1	43
Mince, ...	1	..	1
Sausages, ..	1	..	1
Total, ..	44	1	45

The above noted adulterated sample of Sweet Milk contained 2·80 per cent. of Fat and 8·68 per cent. of Non-Fatty Solids.

Test.	Gen.	Adult.	Total.
Nil.			

MARKINCH BURGH.

	Official.			Test.		
	Gen.	Adult.	Total.	Gen.	Adult.	Total
Sweet Milk, ..	5	..	5	*Nil.*		
Polony, ..	1	..	1			
Sausage Roll, ..	..	1	1			
Total, ..	6	1	7			

WEMYSS AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	5	2	7	*Nil.*		
Grade A.T.T., ..	1	..	1			
Ale, Pale, ..	1	..	1			
Barley, Pot, ..	1	..	1			
Meat, Potted, ..	1	..	1			
Milk, Condensed,	1	..	1			
Mince, ...	7	2	9			
Pepper, White, ..	1	..	1			
Sauce, Worcester-shire, ..	1	..	1			
Sausages, ..	6	..	6			
Sausagemeat, ..	1	..	1			
Sausage Roll, ..	1	..	1			
Tartar, Cream of,	2	..	2			
Trex Vegetable Fat,	1	..	1			
Total, ..	30	4	34			

The above noted adulterated samples of Sweet Milk contained the following :—

Fat. per cent.	Non-Fatty Solids per cent.
2·88	8·89
2·82	8·58

LEVEN BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	25	..	25	*Nil.*		
Pasteurised Milk,	1	..	1			
Lard, ...	1	..	1			
Mince, ...	..	4	4			
Rice, Ground, ..	2	..	2			
Sausages, ..	1	..	1			
Total, ..	30	4	34			

BUCKHAVEN BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	8	..	8	*Nil.*		
Butter, ..	3	..	3			
Cheese, ..	4	..	4			
Jam, Strawberry,	1	..	1			
Lard, ...	2	..	2			
Mince, ...	1	2	3			
Pepper, White, ..	3	..	3			
Sausages, ..	4	..	4			
Tartar, Cream of,	2	..	2			
Tea, ...	1	..	1			
Total, ..	29	2	31			

LOCHGELLY AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	45	1	46	*Nil.*		
Skimmed Milk, ..	2	..	2			
Pasteurised Milk,	2	..	2			
Butter, Salt, ..	6	..	6			
Coffee, ..	1	..	1			
Currants, ..	4	..	4			
Flour, ...	1	..	1			
Ginger, Ground,	1	..	1			
Lard, ...	1	..	1			
Lemon Curd, ..	1	..	1			
Margarine, ..	1	..	1			
Mince, ...	2	1	3			
Oil, Camphorated,	1	..	1			
Peas, Green, ..	1	..	1			
Pepper, White, ..	2	..	2			
Powder, Boracic,	1	..	1			
Sausages, ..	1	..	1			
Tartar, Cream of,	3	..	3			
Tartaric Acid, ..	2	..	2			
Tea, ...	1	..	1			
Vinegar, Malt, ..	2	..	2			
Total, ..	81	2	83			

The above noted adulterated sample of Sweet Milk contained 2·28 per cent. of Fat and 9·00 per cent. of Non-Fatty Solids.

LOCHGELLY BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	15	1	16	*Nil.*		
Certified Milk, ..	2	..	2			
Pasteurised Milk,	2	..	2			
Mince, ...	1	..	1			
Sausages, ..	1	..	1			
Soda, Bicarbonate of, ..	1	..	1			
Whisky, ..	2	..	2			
Total, ..	24	1	25			

The above noted adulterated sample of Sweet Milk contained 2·95 per cent. of Fat and 8·73 per cent. of Non-Fatty Solids.

DUNFERMLINE AREA

LANDWARD.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	64	4	68	*Nil.*		
Mince, ..	7	..	7			
Sausages, ..	3	..	3			
Whisky, ..	4	..	4			
Total, ..	78	4	82			

The above noted adulterated samples of Sweet Milk contained the following :—

Fat. per cent.	Non-Fatty Solids per cent.
2.76	8·52
2·62	8·55
2·84	8·68
2·66	8·64

CULROSS BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	3	..	3	*Nil.*		
Butter, Salt, ..	2	..	2			
Mince, ..	1	..	1			
Oatmeal, ..	1	..	1			
Sausages, ..	1	..	1			
Tartar, Cream of	1	..	1			
Total, ..	9	..	9			

INVERKEITHING BURGH.

	Official. Gen.	Adult.	Total.	Test. Gen.	Adult.	Total.
Sweet Milk, ..	11	1	12	*Nil.*		
Certified Milk, ..	1	..	1			
Pasteurised Milk,	1	..	1			
Total, ..	13	1	14			

The above noted adulterated sample of Sweet Milk contained 2·81 per cent. of Fat and 8·22 per cent. of Non-Fatty Solids.

BEATH AREA

LANDWARD.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	5	1	6
Total, ..	5	1	6

The above noted adulterated sample of Sweet Milk contained 2·81 per cent. of Fat and 7·91 per cent. of Non-Fatty Solids.

Test.	Gen.	Adult.	Total.
Mince, ...	3	..	3
Sausages, ..	2	..	2
Whisky, ..	..	1	1
Total, ..	5	1	6

COWDENBEATH BURGH.

Official.	Gen.	Adult.	Total.
Sweet Milk, ..	7	1	8
Total, ..	7	1	8

The above noted adulterated sample of Sweet Milk contained 2·58 per cent. of Fat and 9·03 per cent. of Non-Fatty Solids.

Test.	Gen.	Adult.	Total
Butter, ..	3	..	3
Lemonade Chrystals,	1	..	1
Margarine, ..	3	..	3
Mince, ...	3	..	3
Mincemeat, ..	1	..	1
Pudding, Black,	1	..	1
Rice, ...	1	..	1
Sausages, ..	8	..	8
Sausagemeat, ..	1	..	1
Sugar, ...	1	..	1
Whisky, ..	2	..	2
Total, ..	30	..	30

Fife County Council.

ANNUAL REPORT

ON THE

Medical Inspection of School Children

For the Year ended

JULY 1933

BY

R. A. KRAUSE,

M.D., D.Sc., D.P.H.,

Deputy County Medical Officer (Welfare).

CONTENTS.

. (a) **NUMBER OF SCHOOLS** 162

(b) **NUMBER OF CHILDREN ON REGISTER AND IN AVERAGE ATTENDANCE—**

Roll (Total) at September 1932, ...	.. 49,590
Average weekly roll to 31st July 1933, ..	.. 49,668
Average attendance to 31st July 1933, ..	.. 44,697
Percentage Attendance, ...	.. 89·99

II. SANITARY CONDITIONS OF SCHOOLS.

Heating of Schools.— Last year new heating schemes were ntroduced in a number (5) of schools. A further inquiry was made luring this year and reports were submitted by the Area Medical)fficers on the heating in the following (31) schools :—

(1) St. Andrews District—Madras College, Kingsbarns, Balmullo.

(2) Cupar District—Newburgh (old buildings), Strathmiglo, Falkland, Dunbog, Springfield, Pitlessie, Gateside, Craigrothie and Kemback.

(3) Anstruther District—Kirkton of Largo, Arncroach, Carnbee, Colinsburgh and Largoward.

(4) Kirkcaldy District—Leslie H.G., Leslie East, Chapel, Preston, Coaltown of Balgonie, Burntisland Episcopal.

(5) Cowdenbeath District—Ballingry (Rooms 12 and 13), Kelty P.S., Oakfield H.G. (East Building), Beath Secondary (North side).

(6) Dunfermline District—Torryburn (old school), Culross (Temporary), Oakley R.C. and Carnock.

The General Purposes Sub-Committee recommended, that for the arger schools, Madras College, St. Andrews, Leslie and Newburgh Schools, central heating should be introduced. In each of these three chools the recorded temperature readings left no doubt that something ught to be done. In the case of Newburgh (old school), the defective eating has been reported upon repeatedly and gas heating was introluced. This, however, has not been found adequate and temperature eadings of 40°F. or thereabouts have been repeatedly recorded. Besides the inadequacy of the gas radiators, there are no ventilators o take away the gas fumes. These simply mix with the air of the tmosphere and vitiate the air the children have to breathe. Further, he following small schools were also selected to be provided as soon as ossible with a modern heating installation :—Chapel, Dunbog, Kirkton f Largo, Pitlessie and Springfield.

Regarding the other schools, whose claims for consideration to have improved heating were put forward, conditions were found to be nearly as good as in those already indicated, and the Committee thought they would have to be held over until a later date.

Water Supply.—Nothing to report.

Latrines, etc.—In the following schools trough closets were replaced by individual water closets :—Auchterderran H.G., Lochgelly H.G., St. Leonard's Infants (Dunfermline), Culross Infants. Improved sanitary arrangements were also carried out in the following schools :—Kemback (new latrines, drainage, etc.) ; Chapel (washdown W.C.'s introduced) ; Cameron (new latrines and pumping plant) ; Madras College, St. Andrews (new latrines).

Clinics.—At Burntisland School a partition has been erected in the clinic, and has so divided it into a smaller and a larger room. By this arrangement it will be possible for eye refractions to be carried out while the other room is being used for the treatment of minor ailments. When necessary the larger room can also be used as a weighing room for babies, or as a waiting room in very cold weather.

Alterations and Additions.—At Abdie School a staff room with adjoining W.C. was added. At New Gilston alterations were carried out which increased the size of the infant class room, and provided a new cloakroom. At the same time a new heating system was installed. The new additions to Buckhaven Secondary School (now Buckhaven High School) were opened for use. It is, however, pointed out by the Area Medical Officer that although there has been an increase in the school population, no additional latrine and W.C. accommodation has been provided. The new Sinclairtown School, Kirkcaldy, was opened. It includes a recreation hall, with a dressing room and sprays, a clinic and other interesting features. The old Sinclairtown Infant Department has been remodelled to provide new staff-rooms and improved lighting for some of the classrooms. The old Sinclairtown Senior Department has been altered for use as a Trades School. At Madras College, St. Andrews, new cloakroom accommodation has been provided.

Electric light has been introduced into the following schools :—Kilconquhar, Waid Academy (old portion), Letham and Auchtermuchty (main part).

III. ORGANISATION AND ADMINISTRATION.

There was no change in the organisation or administration of the County of Fife School Medical Scheme. There are six areas in each of which an Area Medical Officer is responsible for the school medical inspection and treatment. In the two large burghs, Kirkcaldy and Dunfermline, this work is in the hands of the Burgh Medical Staff

except in Dunfermline, where the clinic treatment is carried out in the clinic of the Carnegie Dunfermline Trust.

Whilst there has been no change in the scheme of school medical inspection, the work in the County was held up in the Burntisland and Markinch Areas, because the vacancy which occurred there at the beginning of the school session, was not filled up. Further, the resignation of the Area Medical Officer for the Buckhaven and Leven Area, Dr. Chisholm, brought about the transfer of Dr. Thomson to this area, and the appointment of a new area Medical Officer, Dr. Comrie, for the Lochgelly Area. These changes naturally were instrumental in reducing the total amount of school medical inspection work in Fife.

The Area Medical Officers, in carrying out their work paid 1,046 visits to the schools for medical inspection of routine and non-routine cases. This is a reduction of 127 visits over last year. They also made 197 special visits (special inquiries, etc.). The medical staff of Kirkcaldy and Dunfermline Burghs made 432 ordinary and 9 special visits.

The whole-time Welfare Nurses, who act as School Nurses as well as Health Visitors, along with the District Nurses (who perform the duties of school nurses in the rural districts) paid 2,425 visits to the schools in the County (Dunfermline Area 564 ; Kirkcaldy Area 824 ; North-East Fife 615).

IV. PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

Nurses' Inspections.

The whole-time Welfare Nurses carried out inspections of school children at their school visits. They inspected 17,292 children and 7,578 (County 5,949, Kirkcaldy Burgh 895, and Dunfermline Burgh 734), of these had a defective condition. The general good condition of the children is being maintained. There is one condition, namely, ringworm of the scalp, which has the lowest recorded figure for years. Over 10 years ago there was such a large number of ringworm cases that the Education Authority were asked to appoint extra nurses (6) to cope with the work involved. Over 10,000 children were then inspected and 359 cases were found to be infected with the fungus. The subsequent scheme, of clinic and X-Rays treatment, introduced, has gradually reduced this number to 82 in 1927, 42 in 1929, and 32 in 1932. These results must be considered as very gratifying and as justifying the additional expenditure incurred.

The Welfare nurses also made 20,819 re-inspections. Of these children 1,044 required to be " followed-up " and this necessitated 3,280 home visits. The district nurses inspected and re-inspected 10,822 children. There were 708 " follow-up " cases and these made 1,222 home visits necessary.

Number of Children examined and inspected by the Medical Officers.

Entrant Infants, ...	4,003
7 year olds, ...	2,276
9 year olds, ...	3,869
13 year olds, ...	4,819
15 year olds, ...	114
Total No. Routine Age Groups, ...	15,081
Non-routines, ...	6,249
Re-examinations, ...	2,922
Special Class Children, ...	160
Junior 15b Students, ...	19
Number of Children seen at Clinics otherwise than for treatment (Dunfermline excluded), ..	150
Total Number Inspected by Medical Officers, ..	24,581
Total Number Inspected 1931-32, ...	28,320

Summary of Defects.—The number of children belonging to the routine age groups and examined were as follows :—(1) Kirkcaldy Burgh 2,306 ; (2) Dunfermline Burgh 1,762 ; (3) North-East of Fife 2,212 ; (4) Kirkcaldy Landward 3,868 ; (5) Dunfermline Landward 2,657, or a total of 12,805. This number does not include the 7 year old group. The defects found in these 12,805 children are as below.

	Routines.	*Per-centages.*	*Non-Routines.*
Clothing—			
Dirty	34	0·26	10
Insufficient, ...	16	0·12	292
Footgear—			
Defective, ...	438	3·4	52
Useless, ...	127	0·9	173
Barefooted, ...	38	0·21	269
Cleanliness—			
(*a*) Head—Nits and Dirty, ..	1300	10·1	152
Verminous, ...	372	2·9	178
(*b*) Body—Dirty (Slight), ..	887	6·9	180
Very dirty, ...	64	0·49	25
Verminous, ...	9	0·07	4
Condition of Skin—			
(*a*) Head—Ringworm, ...	..	..	6
Impetigo, ...	72	0·56	105
Other Diseases, ..	48	0·37	33

(*b*) Body—Ringworm, ...	2	0·01	2
Scabies, ...	15	0·11	54
Impetigo, ...	17	0·13	33
Other Diseases, ..	85	0·66	144
Nutrition—			
Below Average	1571	12·2	212
Very bad, ...	75	0·58	65
Teeth—			
1-4 Decayed, ...	6460	50·4	329
5 or more decayed, ...	1974	15·4	86
Oral Sepsis, ...	667	5·2	36
Nose—			
Catarrh, ...	149	1·1	45
Obstruction, ...	190	1·4	62
Other diseases and defects, ..	146	1·1	48
Tonsils—			
Slightly enlarged, ...	2791	21·7	193
Markedly enlarged, ...	888	6·9	199
Lymphatic Glands—			
Cervical—Slightly enlarged, ..	8022	62·6	275
Markedly enlarged, ..	286	2·2	93
Submaxillary—Slightly enlarged, ..	5769	45·05	80
Markedly enlarged,	78	0·6	16
External Eye Disease—			
Blepharitis, ...	383	2·9	111
Conjunctivitis, ...	54	0·42	34
Corneal Opacities, ...	21	0·16	11
Squints and other defects, ..	305	2·3	181
Other diseases, ...	73	0·5	28
Visual Acuity—			
6/6 with one eye, ...	7481	84·9	5683
6/9 to 6/12 with one eye	902	10·2	287
6/18 with one eye, ...	374	3·2	260
Wearing glasses, ...	388	4·4	181
Ears—			
Wax, ...	1703	13·2	183
History of Otorrhoea, ...	305	2·3	37
Otorrhoea, ...	101	0·78	112
Other diseases and defects, ..	31	0·24	24
Hearing—			
Slightly deaf (both ears), ..	54	0·42	13
Markedly deaf (both ears), ..	25	0·19	22

Speech—			
Defective articulation, ...	139	1·08	21
History of Stammering, ...	14	0·1	4
Stammering, ...	33	0·25	8
Mental Condition—			
Dull or Backward, ...	196	1·5	63
Markedly Backward, ...	67	0·52	85
Heart and Circulation—			
Functional disease, ...	62	0·48	19
Organic disease, ...	68	0·53	42
Anaemia, ...	31	0·24	34
Lungs—			
Bronchitis, ...	137	1·06	40
Phthisis (Pre-tuber), ...	147	1·1	42
,, (Susp. tuber), ...	18	0·14	17
Other diseases, ...	13	0·1	18
Nervous System—			
Chorea, ...	3	0·02	15
Infantile paralysis, ...	11	0·08	11
Epilepsy, ...	4	0·03	3
Tuberculosis (*Non-Pulmonary*), ..	32	0·24	50
Rickets—			
Slight, ...	131	1·02	8
Marked, ...	12	0·09	4
Deformities—			
Congenital, ...	112	0·87	17
Acquired, ...	61	0·47	55
Infectious Diseases, ...	5	0·03	3
Contagious Diseases, ...	48	0·37	47
Other Diseases, ...	105	0·82	52
Other Defects, ...	59	0·46	28
Vaccination—			
Entrant Infants (4,003)—			
Vaccinated, ...	1717	42·8	..
Poorly marked, ...	284	7·09	..
Not vaccinated, ...	2002	50·01	..
Other Age Groups (8,802)—			
Vaccinated, ...	2681	30·4	..
Poorly marked, ...	2161	24·5	..
Not vaccinated, ...	3960	44·9	..

(A) Children Suffering Educationally because of Physical Defects.

The number of children coming under this heading was as follows :—

(*a*) North-East Fife.—Dr. MacLeod reports that " as in previous years, any children unable to walk to school were brought in wheeled chairs. This arrangement appeared to work satisfactorily in all cases known in the district." She also refers to children who would benefit from a period spent in a Convalescent Home and states "it is unfortunate that there is no provision for such cases. These children (cardiac cases, sufferers from asthma, bronchitis, etc.) as a rule attend the ordinary schools as they are able, but in many cases their education must obviously suffer to a greater or lesser extent. It is also unfortunate that no educational facilities are provided for children in Glenlomond Sanatorium." Any child kept there for a prolonged period, a year or more, must suffer educationally. There are two cardiac cases who have been absent for long period, also a case of diabetes in a girl of thirteen.

All the deaf mutes of school age are in attendance at special institutions. There is, however, the case of a pre-school deaf child to which reference was made in last year's report. The Education Committee, however, refused to be responsible for the education fees for this case until it reached the age of five. It is very unfortunate that this decision had to be come to, as it deprived the child at its most formative years, from certain education facilities which the hearing child obtains throughout the pre-school period, but the deaf child cannot obtain without special teaching facilities. The result is that even with the best educational methods used, at the special schools or institutions, such a deaf child remains handicapped.

In this area there are eight children who are definitely educationally blind. Three of these attend the myope class in Dundee, and one is in attendance at Kirkcaldy Sight-Saving Class. Regarding the other five, one of them is also mentally retarded and should be placed in a special class. The other four are being kept under supervision and if found that their eye condition is deteriorating, they will be recommended for admission to a sight-saving class.

(*b*) Kirkcaldy Landward.—Dr. Chisholm reported that there were about 17 children physically defective in his area who should be placed in a special class for physical defectives. This was reported to the Schools Sub-Committee who investigated the matter and found that the Bain Hospital in Leven was suitable for use as a school for physically defective children and recommended that this building should be used for this purpose. He also reports having found two entrants with organic heart disease—these children are being carefully watched. One was found with marked congenital defect of the heart of which the parents were unaware. An old case of heart disease in a child of six years had to be excluded from school. " The parents were notified to seek medical advice about a year ago. The family doctor would

not agree the condition was organic and the child was allowed to live an active life. In the summer the child took measles and was off school for a long time. On her return to school it was noticed by the teachers the child did not look well. On medical examination it was found that the heart condition was much worse and definitely organic."

In the Lochgelly district one girl was found to be educationally blind (high myopia) and was transferred to the Sight-Saving Class in Kirkcaldy. Another girl was found to be a borderline case. Special arrangements were made for her in the class and she is to be re-examined by the eye specialist to determine whether transference, is here, also advisable.

Dr. Comrie further reports that 34 children " were found to be suffering from a purely physical defect (e.g., bronchitis, asthma, tuberculous glands, tuberculous abdomen) of such a degree as to interfere with their education chiefly from irregular attendance, but not sufficiently so as to make special class education necessary." No children were found to be suffering from a purely physical defect of such severity that special class education was indicated.

(*c*) In the West Fife district eighteen children are reported as suffering educationally from physical defects, (e.g., chorea 2, cardiac 2, infantile paralysis 3, achondroplasia 1, deafness 2, educationally blind 2, weak chest 6).

(*d*) and (*e*) In Kirkcaldy and Dunfermline Burghs no child was found to suffering educationally because of physical defects. Ordinary class education seemed suitable in all cases.

(B) Number of Children suffering in their Education because of Mental Retardation.

(*a*) North-East Fife.—A special class for mentally defective and backward children was started in Cupar. It accommodates pupils from Cupar and surrounding districts. There are still fully 70 children in the area for whose education no provision is made. A special class might with advantage be inaugurated in St. Andrews. There is however, at present, lack of accommodation for such a class.

(*b*) Kirkcaldy District.—The A.M.O. states that he finds " that there are a great number of mentally defective children not being brought to our notice by teachers. This fault is more common in some schools than others. These children are being allowed to struggle on in ordinary classes "—perhaps three or more years backward.

In the Lochgelly district 17 cases were reported by the teachers as being in their opinion suitable for special class education. Of these 10 were recommended for transfer to Special Classes. The other seven are to be further inquired into next session.

(*c*) Dunfermline District.—Eight children were examined and recommended for the Special Classes.

(*d*) and (*e*) In Kirkcaldy Burgh 15 children were examined for mental backwardness and 4 boys and 3 girls were recommended to be transferred to the special classes. In Dunfermline Burgh 9 reports were submitted for children for whom special class education was desirable.

(C) Number and Condition of Children suitable for Institutional Treatment.

(*a*) North-East Fife.—There are 19 cases known to be suitable for institutional care. Seventeen of these are uneducable mental defectives and the other two educable epileptics. Neither of the latter has attended school for the past 18 months. In no case, however, do the parents desire institutional treatment at present.

(*b*) Kirkcaldy District.—In the Wemyss Area there are eleven cases suitable for institutional care. In five of these the parents are agreeable to the placing of their children in an appropriate institution. A further six cases will require further investigation.

(*c*) Dunfermline District.—There are seven cases uneducable and suitable for institutional care. In three cases the parents are agreeable.

(*d*) and (*e*) In Kirkcaldy Burgh 5 children who had been excluded from the special classes were re-examined and were still found uneducable. Arrangements are under consideration for the admission of these children to suitable institutions.

One boy was removed from an ordinary to an industrial school.

In Dunfermline Burgh seven cases were examined who were considered suitable for institutional treatment. With the exception of one case this form of treatment was not desired by the parents.

In both these Burghs, a voluntary mental welfare association has set up occupation centres for those children who are trainable but unsuitable for special class instruction.

(D) Number of Children who are suffering in their Education because of lack of (i) Nutrition and (ii) Clothing.

(*a*) North-East Fife.—(i) Twenty-nine boys and 20 girls were thought to be suffering in their education as a result of malnutrition. Of these 1 boy and 1 girl were provided with soup at school. Sixteen boys and 10 girls were given a malt or cold liver oil preparation. In the case of 12 boys and 5 girls, the parents were asked to provide extra nourishment and one girl was sent to a convalescent home. Three girls whose parents refused to allow them to take food at school, were kept under supervision at school.

(ii) Seven children were found to be unable to benefit from the education provided because of lack of boots. Six of these cases were referred to the School Management Committee and in the seventh case the parents provided boots.

Three children were found to be inadequately clad. Two of these cases were referred to the Local Committee.

(*b*) Kirkcaldy District.—(i) In Lochgelly 13 children were found to be under-nourished. Extra milk was given in three cases for periods varying from 3 to 6 months during the winter. It was found possible to discontinue this during the summer. Ten children who were not so markedly malnourished were given a malt preparation in school for periods of 1 to 9 months. Three of the cases were continued into the summer months. It was not found necessary to supply meals to any school children.

(ii) 798 children were examined in conjunction with headmasters for the supply of boots and clothing. A very large proportion of these were examined at the instance of the parents. The others were found at medical inspection or referred to the medical officer by the head teachers. Of the 798 children, 85 were recommended for the supply of clothing only, 538 boots and clothing, and 74 boots only.

(*c*) Dunfermline District.—(i) Cowdenbeath Area.—In this area 40 children were examined for malnutrition. The majority of these were found by the doctor and nurse at medical inspection and a few were sent up by head teachers. Of these children 29 were supplied with special nourishment (malt preparation) at school, 7 were recommended to be supplied with school meals and 2 a meal and milk in school. Other two children were referred to the Tuberculosis Officer for his attention. General improvement was obtained in all cases although there was no marked increase in the weight of these children. Those getting a meal and milk in school showed the greatest improvement.

West of Fife Area.—Twenty children were examined because of malnutrition. Twelve were supplied at school with a malt preparation and 8 children were given milk.

(ii) Cowdenbeath Area.—428 cases were seen following upon application by the parents for boots and clothing. A few cases, however, were seen by the medical staff and the parents informed of the need of something requiring to be done.

West of Fife Area.—For boots and clothing, 25 children were examined, five were recommended for clothing, 15 for boots and clothing and five boots only.

(*d*) Kirkcaldy Burgh.—(i) Seven girls were found to be suffering educationally because of malnutrition, and extra nourishment in the form of milk was provided,

(ii) Up till the end of December 1932, 9 boys and 7 girls applied for boots (1 for surgical boots) and clothing. To all the boys boots were provided along with some article or articles of clothing ; in the case of the girls, 7 were granted boots and clothing. In one case boots were provided and in two cases clothes only were granted. Since January, when a new method of dealing with necessitous school children was adopted, 14 boys were found to be suffering from lack of adequate footgear and it was recommended that they be provided with boots—one to have surgical boots. In addition 4 boys were recommended to have clothing, 8 girls to have boots and 5 girls to have clothing.

(*e*) Dunfermline Burgh.—(i) The number of children unable to take full advantage of education because of lack of nutrition was 23. Dinners or milk were supplied at school.

(ii) As regards inadequate boots and clothing, the following recommendations were made :—

Clothing only, ...	13
Boots only, ...	22
Boots and Clothing, ...	17

(E) Children suspected to be suffering from Neglect.

This year again a number of children where there was evidence of neglect had to be specially dealt with by the medical staff.

In the North-East of Fife, the case specially referred to in last year's report, improved enormously in hospital. Since his discharge he has been living with an aunt and is well cared for. A family who have required special attention for the past ten years have left the district. The attendance of the boy, mentioned in last year's report, was again unsatisfactory, and his mother was being brought before the Court. Seven cases of head vermin were referred to the Inspector of the R.S.S.P.C.C. All showed some improvement. In addition, the Inspector continued to watch several families previously under his supervision. There were other three children with body vermin and four with head vermin whose condition was being watched and if necessary may have to be reported to the Royal Society for the Prevention of Cruelty to Children.

In the Lochgelly District there were twenty-one children (twelve families) who required special supervision. None of these children showed any gross degree of malnutrition, many were inadequately clad and all were in a very unsatisfactory state as regards cleanliness. The homes were visited by the Inspector, R.S.S.P.C.C. Considerable improvement was at once shown in all cases, but a few tended to revert to their former condition, when supervision was relaxed.

In the West of Fife there were eight children (three families) who suffered in their education because of neglect by their parents. In the

case of two of the families improvement took place after repeated visit by the Inspector of the R.S.S.P.C.C. The parent of the third famil was convicted for neglect and since that time there has been a marke improvement.

In the two large Burghs, Kirkcaldy and Dunfermline, no cases wer found where the education was affected through parental neglect.

(F) Total Number of Children whose Visual Acuity was Inspecte (Routine and Non-Routine cases) and the Number found with Defecti Vision.

(*a*) North-East Fife.—The Area Medical Officer reports th 875 boys and 1,050 girls had their eyesight inspected. Of these 1 boys and 206 girls were referred to the School Clinic for a more detail examination. Eventually 33 boys and 45 girls were referred to t Eye Specialist.

A few cases of refusal to have their eyes examined occurred but only two of these did the teachers admit that there was any interferen with school work, and in both cases it is still hoped to be able to persua the parents to agree to the examination.

Sixty-nine boys were tested by the Drevor-Collins Group Test f colour vision. Ten of these were tested individually, and one w found to be definitely colour blind. In five others there was so defect of colour sense.

(*b*) Kirkcaldy District.—In Wemyss Area 321 boys and 471 gi were inspected and of these 13 boys and 16 girls were referred to t School Clinic. The number of cases placed before the Eye Special was 6 boys and 4 girls. There were no refusals after the one or t refusals, in the first instance, had been followed up in the home by t school nurse.

In Lochgelly Area 2,053 children were inspected and of these 2 were found to be below $\frac{6}{12}$. The eyes of 185 were refracted at the sch clinic and 97 were referred to the Eye Specialist. Only one parent fused to have his child's refractive error investigated. As the chil eyesight was not markedly abnormal, no further steps were tak Six children although notified to attend three times did not appe These cases are to be followed up next year. One girl was fou educationally blind from severe short-sight, and was transferred the Sight Saving Class in Kirkcaldy. Another case is being kept un supervision.

(*c*) Dunfermline District.—Cowdenbeath Area.—In this ar 706 children had their eyesight inspected as to visual acuity. Of th 240 were referred for examination at the school clinic and 38 pla before the Eye Specialist for his opinion. In five cases the pare

efused to have the children's eyes examined. These five had arrangements made for the eyes to be examined privately after being interviewed by the Area Medical Officer. 178 boys aged 12 were examined or colour vision. Four cases were found with defective colour sense.

West of Fife Area.—In the West of Fife 1,226 children were inspected. 04 were referred to the School Clinic. There were four refusals. They ll agreed to this examination after being interviewed by the nurse and he doctor. 15 children were put before the Eye Specialist and he also e-examined 13 other cases.

(*d*) Kirkcaldy Burgh.—The Medical Officer reports :—

" The number of children inspected for defective eyesight :—

Boys.	*Girls.*
1399	1326

)f these 170 boys and 182 girls were examined at the School Clinic. The parents of 15 boys and 15 girls refused, after repeated intimations o allow their children to be examined at the Eye Clinic. Cases which vere found to have had nothing done in the way of treatment were isited in their homes and the parents advised of the advantages of arly eye examination treatment. A proportion of the children had heir eyes tested by their own doctor, at Edinburgh Royal Infirmary or y local opticians, and had thus obtained spectacles without the assistnce of the Education Authority."

(*e*) In Dunfermline Burgh the number of children whose eyesight vas inspected was 830 boys and 919 girls of routine ages and 508 boys nd 594 non-routines. At the Eye Clinic 205 were examined and 0 were referred to the Eye Specialist. There were 9 refusals.

By the group testing for colour vision, 137 boys and 113 girls were ested. Two boys were found to be colour blind.

Eye Clinics.

There were 1,225 children examined at 197 cliniques for refractive rrors and other conditions of the eyes. This number was lower than hat of last year, mainly because there were no ordinary eye cliniques eld in the Burntisland-Markinch Area. The distribution of cases for he County and the large burghs was :—County 803, Kirkcaldy Burgh 84 and Dunfermline Burgh 205. There were also 207 re-examinations. n the children examined the following refractive conditions were ound :—

Hypermetropia, ...	442
Myopia, ...	123
Hypermetropic Astigmatism, ...	390
Myopic Astigmatism, ...	110
Mixed Astigmatism, ...	46
Anisometropia, ...	68
Irregular Refraction, ...	9

In 28 cases both eyes were found to be emmetropic, and in 14 there was spasm of accommodation. Strabismus was present in 256 cases and nystagmus in eight. Besides these, 49 children had blepharitis and conjunctivitis, 23 corneal nebulae, 3 corneal ulcers and there were 32 with other conditions.

The more difficult cases of refraction, and any other presenting specia difficulty, were placed before the two Eye Specialists, Drs. Allister MacGillivray, Dundee, and Sampson, Dunfermline. These consultants attended at 33 cliniques, examined 424 (County 346, Kirkcaldy Burgh 58 and Dunfermline Burgh 20) children and re-examined 103 cases (County 77, Kirkcaldy Burgh 16, Dunfermline Burgh 10). The numbe examined is a definite increase on last year. This is due to the cases in the Burntisland-Markinch Area being referred direct to the Eye Specialist.

The conditions seen by the two Eye Specialists were :—

Hypermetropia, ...	6
Myopia, ...	3
Hypermetropia Astigmatism, ...	10
Myopic Astigmatism, ...	11
Mixed Astigmatism, ...	3
Anisometropia, ...	2
Irregular Refraction, ...	
Both eyes emmetropic, ...	1
Spasm of Accommodation, ...	1

As a result of these examinations, six children were declared to b educationally blind.

(G) Number of Cases of Children in whom Defects of the Ear, Nos and Throat were found.

There were no specialist clinics arranged for. In the Cowdenbeat area the treatment of chronic suppurative otitis media by means anti-virus has been tried out. " It has been found that some 28 p cent. of cases dry up within a few days of commencing treatment another 25 per cent. are much improved and may cease to discharg though inspissated pus remains in the meatus. The remainder of th cases remain unaffected by the treatment ; a few occasional cas discharge more profusely while having treatment."

" It has been found that the results of treatment are the san whether the child be treated three times weekly or daily."

" If no improvement is noted within a few days, it is unlikely th improvement will occur at all and if it does occur later, it is likely to b due to the regular cleansing of the ear, rather than to the use of an virus,"

(h) Number of Children (New Cases) with Crippling Ailments.

Thirty-five new cases of crippling ailments were reported last year—twenty-six in the County, four in the Burgh of Kirkcaldy and five in the Burgh of Dunfermline. The allocation of the conditions causing the crippling ailments is as follows :—

Severe Rickets	3
Tuberculosis—Lesions of Bones and Joints, ...	3
Poliomyelitis Anterior Acuta of Crippling Degree ..	10
Congenital Deformities of Crippling Degree	8
Other Crippling Ailments, ...	11

From last year there were also 119 cases that were kept under observation.

The Public Health Committee of the County have agreed to appoint an Orthopaedic Consultant Surgeon. They have been fortunate in securing the services of Mr. W. A. Cochrane, who has had an extensive experience of orthopaedic and remedial surgery in this country and abroad. As Surgeon to the Princess Margaret Rose Hospital for Cripple Children (Fairmilehead) Mr. Cochrane will be in a position to ensure that prompt and necessary operative treatment will be instituted immediately. It will, however, also be necessary to consider the appointing of an orthopaedic trained nurse. Her duties would consist, in the main, in keeping in touch with all remedial or orthopaedic cases to supervise them and to ensure that the surgeon's advice and instructions are properly carried out. She should also be able to remove and replace plaster casts and splints, and carry out a certain amount of remedial work.

The protracted nature of the treatment in most of these cases makes supervision essential if the good and lasting effects of the operative treatment are to be maintained.

V. MENTALLY AND PHYSICALLY DEFECTIVE CHILDREN.

(a) Special Schools and Classes.

The four special classes in Kirkcaldy that have been housed at the North School were transferred to a new place, namely, " Eastbank," adjoining Viewforth Advanced Division Centre. By this change the special classes will be more or less self-contained, allowing greater freedom and more scope for their outdoor activities. The situation of the new school (a converted house) is excellent, and gives the maximum amount of sunshine and fresh air to these children. Well planned alterations were made to supply a sufficient amount of practical accommodation to meet the present requirements of the teachers.

The myope or sight saving class has been removed from the East School to the North School, where more practical facilities are available.

At Castlehill School, Cupar, a special class has been established This was made possible by the opening of the new Bell-Baxter School Whilst the bulk of the children are drawn from Cupar itself, a number of them are brought in from the surrounding district.

The following were the numbers of children on the roll of the various Special Classes in September, 1932 :—

	Boys.	*Girls*
Auchterderran East	13	8
Castlehill, Cupar	14	6
Crossgates	26	15
Culross	8	2
Eastbank, Kirkcaldy	43	24
Leslie East	8	4
Lochgelly East	10	8
Methilhill	48	38
McLean, Dunfermline	32	16
Myope Class, North School, Kirkcaldy	7	8
Total	209	129

During the year 22 boys and 11 girls were admitted, and 20 boys and 14 girls were discharged from these classes.

(b) Institution Cases.

In September 1932 the following number of children from Fife were in various institutions :—

Baldovan (M.D.)	
Larbert (M.D.)	
St. Joseph's, Rosewell (M.D.—R.C.), Midlothian ..	
Waverley Park Home, Kirkintilloch	
Royal Blind Asylum, Edinburgh	
Institution for Blind, Dundee	
Donaldson's Hospital (Deaf), Edinburgh	
Royal Institution for Deaf, Edinburgh	
Institution for Deaf, Dundee	
East Park Home for Infirm Children, Glasgow	
Lauder Road Home (Cripples), Edinburgh	
Total	

During the year nine further children were admitted and sixteen were discharged. A deaf child was also admitted to St. Vincent School (R.C.), Glasgow, and thus the total at the end of the session was 53.

Under the Blind Persons Act (1920) the Education Committee were responsible for the training of twelve trainees at Edinburgh Royal

Blind Asylum. There were other three added—one of these being admitted to Dundee Blind Asylum. Eight finished their training and the others were sent home as unsuitable for further training.

VI. ARRANGEMENTS FOR PHYSICAL EDUCATION AND PERSONAL HYGIENE OF CHILDREN.

(a) Physical Education.

In the last report, Mr. George, Superintendent of Physical Education, indicated what the conditions were in regard to physical education in Fife and brought forward his suggestions for improving the physical education scheme, especially as to the better and more efficient employment of staff and the better equipping of gymnasia. In his report this year he shows how far his recommendations have been able to be carried out.

The outstanding changes to be recorded are :—Firstly, those which aim at the teaching of all post-primary pupils by the specialist teachers. To make this effective the specialist teachers were withdrawn from the primary school teaching of physical education, and the class teacher made more definitely responsible for the instruction of this type of pupil under the supervision of the more experienced specialist teachers. Secondly, by this re-arrangement, it will be made possible to aim at giving two periods of physical education per week to each post-primary pupil. This does not include the "games" period for which the class teachers are mainly responsible.

Other changes brought about are those relating to transfer of gymnastic apparatus from gymnasia where not required to those in need of more up-to-date equipment. Mr. George emphasised the great importance of a good gymnastic floor in the physical education scheme and the need for it to be kept clean as well as in a fit and smooth condition. It is mainly for this reason that central halls should not be used for physical education, and whenever possible separate gymnasia should be added to such schools, expecially at Buckhaven and Cowdenbeath High Schools where at present the facilities are inadequate and gymnastic classes have to be taken in other premises or in the playground.

The condition of some gymnasia floors is very unsatisfactory as can be seen from the report on "Accidents in Schools." A large number of these accidents is due to pupils getting splinters into their feet. The condition in these gymnasia is due to the floors being wrongly laid. The Education Department in their "Memorandum on Physical Education" point out that "the floor should be of joists covered with narrow tongued and grooved boards laid across the gymnasium." The children, when running, do so across the grain of the wood and there is less liability to slip as well as to tear off splinters of wood.

Mr. George refers to the unsatisfactory condition of many of th playgrounds which prevents the fuller use of these playgrounds fo physical education. In schools where a hall does not exist or is inade quate, a properly constructed playshed would be effective and cheape to build than an enclosed hall. Such a substitute was recommende for the smaller schools in the school medical report of 1923. It woul also be a great help in meeting the requirements of schools where th present facilities were inadequate as well as serve as a better playshe in wet weather than the narrow covered strips at present in vogue.

In the summer of 1932 a number of physical ability tests were trie out on the 11 year old pupils who were tested by the group mental test I here wish to acknowledge the great help Mr. George and his sta gave in carrying out these tests. Unfortunately lack of the necessar statistical clerk has prevented the results from being worked up f this report.

Report by the Superintendent of Physical Training.

In the Report of last session, mention was made of the conditio under which physical training of pupils was carried out, and suggestio were made as to the methods by which improvements could be effecte Further reference will be made to the foregoing in the present Repo

Staff.—The physical training staff consists of nine male speciali teachers, nine female specialist teachers, and a superintendent.

Bearing on the question of staff, in the Report of last year, referen was made to the fact that in some schools post-primary classes we receiving neither physical training nor games. The Schools Committe in consultation with Headmasters of Higher Grade and Seconda Schools, after carefully considering the matter recommended th post-qualifying pupils should receive two periods of gymnastics a one period of organised games per week, and that post-intermedia pupils should receive not less than one period of gymnastics and o period of games per week. To give effect to this it was necessary increase the number of days on which specialist teachers attend most of the post-primary and secondary schools. By reorganising t time-tables throughout the County, provision was made for the ext time required without increasing the staff.

In arranging time-tables, consideration was given to the followi points :—

(1) Specialist teachers to overtake the physical training of po primary pupils in all schools in which there are three or m such classes.

(2) Wherever possible the physical training of boys must overtaken by a male specialist teacher and the traini of girls must be overtaken by a female specialist teacher

(3) Specialist teachers to act in an advisory capacity in connection with the training of primary school pupils.

(4) Economical use of staff, having regard to sizes of schools, travelling expenses, and bus and train facilities.

It was found, when reorganising, that the rotation in which primary schools were visited by specialist teachers varied considerably and as it was necessary to arrange new time-tables for the staff, the opportunity was taken to make the rotation of visits uniform throughout the County. Although many schools were visited less frequently than formerly, the splendid co-operation between class and specialist teachers along with the introduction of a definite scheme of work, have enabled the work to be carried out even more efficiently than was the case in previous years. Only the most experienced specialist teachers available are now selected to visit primary schools.

Gymnasia, Apparatus, Floors, etc.—The lack of accommodation in Buckhaven Secondary School necessitates the use of the hall in Buckhaven Primary School during one whole and one half day per week. A similar position has arisen in Beath Secondary School but as there is no other gymnasium available the physical training of the pupils has to take place in a classroom or in the playground. A gymnasium is urgently required at each of these schools. At present, in these schools the central hall acts as the gymnasium, but it is a very unsatisfactory substitute on account of the continual passing to and fro of pupils, the disturbance caused to other classes, and on account of the difficulty experienced in keeping the floor clean and adequately protecting its surface.

In connection with new gymnasia, with or without apparatus, attention should be given to the manner in which these are heated. Where no apparatus is provided, the presence of heating pipes along the floor prevents full use being made of walls, and projecting radiators are a continual source of danger to pupils. In all new gymnasia or halls, with or without apparatus, the use of a flat type of radiator is recommended, such as "Ray rods." This not only gives fuller use of the floor space but also eliminates possible accidents resulting from children running into them. Where pipes and radiators are placed behind wall bars, proper cleaning is impossible and dust is allowed to accumulate behind the pipes.

In the report of last session, attention was directed to the desirability of installing modern beams, in several post-primary schools, in order to have such schools in keeping with present day requirements. To enable this to be done economically, it was suggested that these should be transferred from schools in which full use was not being made of the beams. It is gratifying to report that this was done and that modern beams have now been installed in Beath Secondary School, Madras College, Buckhaven High School and in Burntisland Higher Grade School. As there are still two schools from each of which one

set of beams could be transferred without impairing efficiency, it is hoped that similar provision will be made in the case of Leven H.G. School. It should be stated that the work of dismantling and erecting the beams was overtaken by the Works Department and was carried out in a very satisfactory manner. The fact that one of the joiners employed by the Education Committee is now specialising in the repairing of gymnastic apparatus makes it no longer necessary to incur the expense of employing a specialist from England. Further, apparatus was previously inspected and reported upon, by a representative from an English firm specialising in the making of gymnastic apparatus. This work is now entrusted to the Superintendent of Physical Training.

Attention is again directed to the unsatisfactory condition of most of the floors used for gymnastic purposes. In many cases the floors have been improperly laid. It is not generally realised that, in modern physical training, more movements are performed kneeling, sitting or lying on the floor than in the standing position. In view of this, it is of the utmost importance that they should be in a safe condition and that they should be kept clean. It is suggested that, as an experiment, where the surface is so badly worn as to warrant the laying of a new floor, instead of doing this, a covering of thick linoleum might be provided.

As there are many schools in which physical training lessons, during unfavourable weather, must be carried out in classrooms where the working space is limited and where the conditions are unsatisfactory, it is suggested that special attention should be given to the size and position of playsheds. To serve as a substitute for a hall, playsheds could be made much broader than they are at present and consideration should be given to exposure and privacy. This would be a distinct advance on the present method of providing two playsheds, neither of which is really adequate for the purpose for which it is intended.

Playgrounds.—School playgrounds are in most cases in a very unsatisfactory condition. While, as a rule, the playing space is of generous dimensions, it is regretted that full use cannot be made of this owing to the unsuitable and dangerous nature of the surface. To minimise the risk of accidents, it is strongly recommended that where strips of concrete have been laid or where a part has been concreted, the remaining portion should be raised to the level of the concrete. A plea is made for the asphalting of all playgrounds, and it is again suggested that if these were available as "open spaces" for the use of children after school hours, District or Town Councils might be invited to share in improving conditions.

Organised Games, Playing Fields, etc.—Following on the recommendations of the Education Committee that provision should be made for organised games during school hours, progress in this direction has been made. From the health standpoint the effect

should be far reaching and if the moral aspect is appreciated and taught, the training should prove of inestimable value to boys and girls.

An important contribution to the success of the games period is the use of the team (house or clan) system. The method advocated is the division of each class into four "houses," say, "Scott," "Shackleton," "Raleigh," and "Cook." This automatically divides the school into four houses, with representation in each class. The division of the class in this way prevents time being wasted in getting pupils in readiness for games. Inter-House games are easily arranged and competition is always keen. Apart from its value in connection with games, the team system may be of service in other aspects of school work and attention is drawn to the fact that it can be adapted to suit any size of class.

Progress is being made in the provision of playing fields and in rural areas it is no uncommon thing to be told that, through the kindness of a farmer, a field has now been secured. Unfortunately, as far as Cowdenbeath and Buckhaven are concerned, little progress towards actually securing fields has been made and it is not likely that these will be provided until an understanding is reached between the Education Committee, the County Council, and District and Town Councils.

A playing field, situated in the vicinity of Kirkcaldy Fever Hospital is required for St. Marie's, Dunnikier and North Schools, while a field, which could be used by Pittencrieff, Milesmark, and McLean Schools, is required in Dunfermline.

Special reference is made to the children's playground and to the splendid playing field which will soon be available in Auchterderran. To embark on such an ambitious scheme required a great deal of courage and the members of the Committee responsible must be congratulated upon the success which has attended their efforts. In addition, a hall, which will be available for the physical training and indoor games of adults, has also been provided—the first communal gymnasium to be built in Fife. This is indeed progress, and it is hoped that this heralds the day when every community will have its own public gymnasium—available for men and women. It should be noted that the National Playing Fields Association contributed very generously to the whole scheme.

Teachers' Classes.—At the request of class teachers in Cowdenbeath Area, arrangement has been made for a Course to be conducted in Organised Games and Physical Training. It is anticipated that there will be an attendance of over ninety teachers and in view of this two classes are likely to be held, one in Lochgelly and one in Cowdenbeath.

Tests.—In connection with tests recently conducted by the Mental Research Council, an endeavour was made at the same time and with the same pupils, to test the physical efficiency of those concerned.

In the course of the Session the posture of all pupils was examined. This was done with a view to ascertaining the number suffering from postural defects. There appeared to be so many cases of suspected scoliosis and kyphosis that it is desirable that a further test should be conducted by the Medical Staff. It may be necessary to form special posture training classes in all schools in which the physical training of post-primary pupils is overtaken by specialist teachers.

Co-operation.—The interest taken in physical training by members of the Medical Staff is greatly appreciated. It is important that specialist teachers should be conversant with the medical history of pupils and this can only be carried out satisfactorily through co-operation between medical officer and teacher of physical training.

Satisfactory arrangements have now been completed with the College of Hygiene and Physical Education regarding the allocation of schools for next session.

The Juvenile Unemployment Centre was granted the use of a vaulting box, gymnastic benches, and an agility mat.

Conclusion.—There is a decided improvement in the standard of work throughout the County. This is due to the interest taken in the subject by the Education Committee, to the co-operation of head teachers, and to the enthusiasm of class and specialist teachers.

(b) Spray Baths in Schools.

The importance of the spray bath as a part of the physical education is not generally appreciated. It is still considered more from the standpoint of cleansing rather than that of its physiological effects. There are, however, signs that more attention is likely to be given to this latter aspect.

Schools with Spray Fittings.	No. of Children.	No. of Baths taken.
1. Dunfermline High, ...	Nil.	Nil.
2. King's Road, ...	Nil.	Nil.
3. Park Road, ...	84	141
4. Crossgates (Ordinary Classes), ..	98	909
(Special Classes), ..	62	387
5. Kirkcaldy—North (Special Class), ..	11	75
6. Kirkcaldy High, ...	267 (approx.)	1430
7. Sinclairtown, ...	Boys only.	(No record.)
8. Moss-side P.S., ...	Nil.	Nil.
9. Beath R.C. High, ...	Nil.	Nil.
10. Methilhill (Ordinary Classes), ..	265	1416
(Special Classes), ...	62	1212
11. Waid Academy, ...	Nil.	Nil.
12. Bell-Baxter, ...	72 weekly	5688
13. Newburgh P.S., ... about	50 weekly	1900 approx.
	971	13,158 etc.

In 1931-32 the number of children taking spray baths was 707, whilst during the past year an increase of over 200 children using the "sprays" has to be recorded. The attendances rose from 3,444 to over 13,000 baths. This increase is mainly due to the boys of Kirkcaldy High and Bell-Baxter having sprays after their games and sports.

At Dunfermline High School there is only one spray at either end of the Gymnasium. The spray accommodation is thus inadequate to be of any use for class purposes. Further, when used, the water tends to overflow and flood the dressing room. All bathing arrangements in connection with the School's games " are carried out at the Netherton Institute where a great many of the boys take full advantage of the opportunities provided."

In Rosyth no special arrangements are made for spray baths. On the other hand, in Crossgates the headmaster and staff have always taken a keen interest in this aspect of physical education.

The Kirkcaldy special classes children had to be taken from the North School to the East School Clinic where there is a slipper bath. Therefore, only a few could be dealt with at each visit.

No record could be kept of the boys who made use of the sprays in Kirkcaldy High School after the Games periods. For the size of the school the spray bath facilities are definitely inadequate here.

At Sinclairtown, which is a new school, a proper scheme for sprays has not yet been developed and numbers are not available.

In Cowdenbeath there are two schools with spray baths—Moss-side and R.C. High. In the former, the head teacher desires certain improvements as to privacy before she can make arrangements for the use of the sprays for the older girls. At the R.C. High School the facilities are totally inadequate, both as regards the dressing-room accommodation and the number of baths (2).

The teaching staff at Methilhill have always shown their interest in the spray baths and good use has been made of them. The transference of the special classes to Denbeath School necessitates the taking of the scholars to Methilhill for the purpose of bathing, unless eventually provision is made for spray baths at Denbeath Public School.

The two new schools—Bell-Baxter and Waid Academy—both have spray bath arrangements. Good use is made of them at the former but in the latter the heating was insufficient last winter, and it has been found that the sprays when used tend to flood the surroundings because of the low edging.

The new addition at Newburgh P.S. has a fine set of sprays which are well patronised by the scholars. The numbers were not available in former years.

VII. MOTHERCRAFT CLASSES.

A change in the personnel of the nurses overtaking this work had to be made. Nurse A. M. O. Wilson found it necessary to give up the greater part of these classes and Nurse M. M. Petrie took over the most of the classes in Kirkcaldy High and all those in Viewforth Higher Grade Schools. In the following schools it was arranged for the local school nurse to take over the teaching of the mothercraft classes :—

(*a*) Cowdenbeath—Moss-side and R.C. High.
(*b*) Aberhill Public.
(*c*) Leven H.G.

The object of this arrangement was to see whether it was more effective if the local nurse, who knew the conditions of the homes, had the teaching of mothercraft.

Along with these Nurse Petrie retained the teaching of the mothercraft classes in Dunfermline—Queen Anne School, Inverkeithing Public School and Lochgelly East.

From the reports of the nurses the work of the girls must on the whole be considered very satisfactory. Where the results were not so good it was due to the classes being too big (twenty and more) ; classes accommodated in rooms too small, or unsuited for the practical work ; classes lasting too long.

Experience has shown: that these classes, to be properly handled, should not exceed twenty, and a smaller number gives better results. One of the difficulties experienced by the nurses is that very few schools have suitable classrooms. In one school the janitor's store room was thought appropriate for the teaching of mothercraft. As this subject is considered a "side-show" any odd room or corner of the building is thought good enough. At Lochgelly East, as there is no classroom available, the general clinic has to be used—a relatively small room and full of clinic apparatus. Where a class has to make a bed, it is obvious that a large class and a small room are a handicap to good practical work. Another difficulty is the lack of supply of water if an ordinary classroom is used for these classes.

The best time duration for these classes is about forty minutes. The girls are less likely to become tired and restless than is the case where the class lasts for double that period. It is also important that the girls are given plenty of practical work, and not too much theoretical matter however useful it may be considered. It is probably because of this that one of the nurses felt impelled to express the opinion that the teaching of these mothercraft classes should be given to older girls rather than those below fourteen years of age. It must, of course, be remembered that nurses are inexperienced in the teaching of young girls.

VIII. ARRANGEMENTS FOR FEEDING SCHOOL CHILDREN.

According to the statement of expenditure on Meals and Clothing for the year ended 15th May 1933, the amounts incurred are as follows :—

(1) Cost of Apparatus	£51 : 5 : 6½
(2) Meals	94 : 4 : 8½
(3) Boots and Clothing	6497 : 1 : 6
(4) Meals for non-necessitous cases	1219 : 6 : 11
Total	£7861 : 18 : 8

These figures show a reduction on cost of meals for necessitous children but there is an increase in the amount for boots and clothing.

IX ARRANGEMENTS FOR MEDICAL TREATMENT.

(a) Minor Ailments.

(*a*) North-East Fife.—The opening of the new Bell-Baxter School has made it possible for the nurse to have the use of the clinic for treatment purposes.

In St. Andrews Burgh treatment, if required, is carried out at the Child Welfare Centre. The same applies at Newburgh Public School. At Tayport the nurse " is seriously handicapped not only by the lack of a clinic room, but by the lack of any cupboard or box in which to keep dressings." A clinic is to be provided at Anstruther next session.

In the country schools treatment is carried out at the Nurses' own homes or at the homes of the children.

(*b*) Kirkcaldy District.—In the Wemyss Area the general and special clinic work is carried out satisfactorily. At Buckhaven Clinic the number attending is very much smaller " due to the general improvement in the cleanliness of the children and also to the use of the anti-virus treatment of otorrhea." According to the nurse there were 20 new cases and of these 19 remained dry and one relapsed. Eight of last year's cases had treatment continued in this session and these also eventually dried.

In the Lochgelly District there were 97 cases of otorrhoea treated at the clinics. Irregular attendance was the cause here for the results not being always satisfactory. Many of these cases are chronic and do not respond well to treatment.

At Lochgelly the present clinic accommodation is definitely inadequate and unsatisfactory. Here one room serves for medical inspection, eye clinic, dental clinic, minor ailments treatment clinic, U.V.R. treatment room and mothercraft classroom. (Considering the size of the area and the large amount of work that requires to be done, this is a matter that calls for early consideration and attention.)

In Auchterderran Area the relatively scattered nature of the population and schools causes some difficulty in the maintenance of regular attendance at the clinic for treatment. This applies more especially to the younger children.

(*c*) Dunfermline District.—General clinic facilities are considered adequate here except in the Saline-Wellwood Area. "In the Torryburn area the distance from Valleyfield School and the greater distance from Culross School are a drawback." Another school which is unfortunately placed, as regards a clinic centre, is Aberdour.

(*d*) Kirkcaldy Burgh.—"The clinic at Pathhead School which served Pathhead, Sinclairtown and Dysart Schools, has been transferred to the new school at Sinclairtown, where Gallatown children also attend. There is excellent clinic accommodation in the new school but facilities are lacking for boiling water in summer time when the central heating is off—an electric kettle would meet the case for dressings but a more copious supply of hot water would be an advantage in summer time."

"The children from Pathhead are not attending so well as before. Probably distance is a deterring factor in the case of the smaller children."

(*e*) Dunfermline Burgh.—(See Dr. Emslie Smith's Report.)

In the County school clinics (15) the nurses made 1,656 visits and treated 10,240 cases. The number of cases and attendances for the various conditions is as follows :—

	New Cases.	*Attendances.*
Head Vermin	43	224
Ringworm (Scalp)	13	483
Scabies	89	395
Uncleanliness or neglect	4	8
Impetigo Contagiosa	1248	8961
Other skin conditions	158	1157
Otorrhoea	336	7504
Eye Disease (External)	624	7289
Ear Cases	124	542
Nose and Throat cases	81	837
Other cases	7172	21766
Accidents	198	487
Advisory Cases, ...	150	213
	10240	49866

In 1931-32 the number of cases was 9,747 and attendances 53,215. The main decrease in attendances is in otorrhoea (last year 9,378) and in External Eye Diseases (8,695). There is also a continued decrease

the number of cases of scalp ringworm (1931-32—21) and also in ne attendances at the clinic (1931-32—808). These figures are the west recorded for ringworm of the scalp for the past fourteen years.

In the Appendix an analysis of the number of cases and of attendances, at each clinic in the County and for the two large Burghs, are ven in detail. The total number of cases treated in these clinics was 3,254 (17,788 last year) and 98,139 attendances were made by these ses as against 99,202 last year.

In the country districts where there are no clinics, the district nurses sually treat any case either at the nurse's home or at the home of the ild. During the past year 1,633 home treatments were given by 17 the district nurses.

(b) Dental Treatment.

In the County of Fife there are four dentists who carry out the spection and treatment of school children. In the south-west of fe the dental treatment is carried out mainly in school clinics, of hich there are sixteen. The north-east of Fife, being more sparsely pulated, a large amount of the dental treatment is carried out in the hool. For this purpose the dentist has the use of a car to transport r engine and instruments. She also carries with her a head rest, hich can be fixed to the head teacher's armchair. In this area, however, ere are also school clinics (7) where treatment is carried out once eekly or fortnightly, according to the needs of the district.

In the school session 1932-33 the total number of children dentally spected was 17,004. The inspection showed that there were 2,948 ildren (or 17·3 per cent.) with sound teeth, 10,366 had 1-4 defective eth ; 3,120 had 5-8 defective teeth, and 570 had 9 and more defective eth. The dentists issued 13,935 (82 per cent.) dental cards to the rents indicating that their children had defective teeth and that they ght to take their children to a dentist (private or school).

In the two large burghs 6,656 children were inspected—Kirkcaldy 513 and Dunfermline 4,413. In the case of Dunfermline, where ere have been excellent dental facilities provided by the Carnegie nfermline Trust, the number of children with sound teeth was 299 or 31·3 per cent. of those inspected. Here also a smaller number children required to be referred for treatment—namely, 2,237 54·2 per cent.).

In the County, of the number (13,935) referred to the parents for atment, 6,231 or 44·7 per cent. accepted school dental treatment. Kirkcaldy Burgh the acceptances were 36·7 per cent. and in the rgh of Dunfermline 77·4 per cent.

The number of treatments carried out in the country schools was 963. For this 1,230 children made 2,574 attendances. At the hool clinics 2,871 " casuals " and 5,934 appointment cases made

16,033 attendances and received 37,024 dental treatments. The number of treatments given at the various clinics is as follows :—

	Extractions.	Dressings and Fillings.	Total Dental Operations.
Cupar, ...	487	700	1187
Tayport, ...	403	440	843
St. Andrews, ...	482	660	1142
Anstruther, ...	182	332	514
Newburgh, ...	316	335	651
Ladybank, ...	201	137	338
Lochgelly, ...	1572	633	2205
Crosshill, ...	1255	575	1830
Auchterderran, ...	1477	702	2179
Inverkeithing, ...	1029	573	1602
Burntisland, ...	1349	685	2034
Buckhaven, ...	2964	1990	4954
Leven, ...	1290	1518	2808
Markinch, ...	2032	1853	3885
East Wemyss, ...	563	610	1173
Methilhill, ...	775	558	1333
Elie, ...	305	292	597
Cowdenbeath, ...	1933	593	2526
Kelty, ...	1069	551	1620
Torryburn, ...	981	670	1651
Crossgates, ...	655	149	804
Blairhall, ...	331	268	599
Tulliallan, ...	413	136	549
	22,064	14,960	37,024

A further analysis shows that in the case of 3,665 extractions, n anaesthetic was required, whilst in 19,197 extractions a local anae thetic was used. The remainder, 1,743 teeth, were removed under general anaesthetic. Arrangements for the carrying out of a "gas clinic—nitrous oxide gas and oxygen combined with ethyl chlori are used as a general anaesthetic—are only made at three clinics. medical officer is responsible for the administration of the gene anaesthetic.

The removal of teeth constituted about 60 per cent. of the den operations. The other 40 per cent. were more of a "conservative nature. There were 1,767 dressings applied, and silver nitrate appli in the case of 4,182 teeth. Further there were 9,473 fillings insert (4,463 cement, 4,286 amalgam, and 724 silicate), and 83 other trea ments. In quite a number of the children the teeth are very dir looking from the deposit of tartar and this necessitated 960 "scalin operations.

In Kirkcaldy Burgh the dental treatments given were 3,653 extr tions, 1,329 dressings, 681 silver nitrate and scalings, 828 fillings a "other" operations. In Dunfermline 5,940 teeth were extrac (no general anaesthesia), 691 dressings, 4,343 silver nitrate and scalin 4,137 fillings and other dental operations.

X. ACCIDENTS IN SCHOOLS.

Under the scheme of the Education Committee, whereby first-aid material is supplied to schools making application, figures are sent by the head teachers at the end of the school year which give the number and kinds of accidents that have occurred in the schools. This information is of great use in indicating structural defects which, when put right, will materially contribute to a reduction in the number of accidents, especially of the major variety.

The accidents are divided into two main categories, (1) Major and (2) Minor. In the case of the former, the services of a medical practitioner were required. During the past school year 69 schools reported that they had major accidents. In the following four schools there occurred more than five major accidents :—

Queen Anne, Dunfermline	28
Tulliallan P.S.	10
Kirkcaldy High	8
Beath Secondary	7

In the case of Queen Anne School the cramped classrooms, unsuitable stairs and confined playground accommodation are factors responsible for the large number of major accidents.

From an analysis of the figures the major accidents took place in the following situations :—(*a*) gymnasium 16, (*b*) classrooms 18, and (*c*) outside 148.

The " minor " accidents form the majority of the accidents to which the school teachers had to give attention. In the case of 122 schools, 5,900 accidents were reported. These were mainly cuts (2,192), bruises (1,560), splinters (603), burns (158), sickness (960), fits (39), and others (388).

Bruises and cuts occur mainly outside the School building (3,197) but there were 465 cuts the result of work with sharp tools in the classrooms. Splinters which form quite a formidable group were chiefly got in gymnasia (402), but a fair proportion were also got in classrooms (102) and outside (99). The outstanding number of " splinter " accidents was reported from Oakfield H.G., Kelty (90), Lochgelly South (55), Townhill (64), Auchterderran South, almost daily, Limekilns (28), Leven H.G. (25), Dunfermline High (20), and Denbeath (20). The floor at Leven H.G. School has since been relaid. At Dunfermline, the gymnasium floor has been planed and " this has eliminated the large splinter trouble." At Oakfield, the headmaster reports, " drill is now taken in a separate hall, not attached to the school ; practically all the pupils now have proper gymnastic shoes, and boots or shoes have to be put on before pupils can walk from the hall to the school. This, I think, removes the factors which contributed to our large total of small injuries."

In the case of the other five schools (Lochgelly South, Auchterderran South, Townhill, Limekilns and Denbeath), the bad condition of the gymnasium or corridor floor is responsible. The headmasters express the doubt as to the lasting good there would be from simply planing the floors. The wood laid has been wrongly cut, and so, even although it is planed, it tends to wear on hard wear—children marching over the floor from the classrooms with their heavy boots. The wrong laying of the boards, along the length of the gymnasium instead of across, must also be held responsible for the quicker wear and tear of the flooring. Further, the lack of proper gymnastic shoes contributes very materially in making it possible for the children to pick up the splinters, from the poor quality of the wood, when at drill.

Headmasters usually report to the Education Offices any accident where a claim for payment of treatment, etc., might be expected. Last year there were eighty-seven such cases reported. They may be divided into the following categories :—

At Games	7
In Gymnasia	8+(2 splinters).
In Classrooms—	
(*a*) Chemical	4
(*b*) Woodwork	5
(*c*) Laundry	1
(*d*) Ordinary	3
In playground (falls, bumping into each other, etc.)	26+9 due to ice.
Falls on school steps	5
Climbing rails, walls, etc.	8
Accidents with motor vehicles ..	5+1 killed.
Miscellaneous	3

APPENDIX

TREATMENT (MINOR AILMENTS).

(a) CLINIC CASES.

Condition.	Torryburn.	Blairhall	Inverkeithing.	Crossgates	Beath.	Kelty	Lochgelly	Crosshill	Auchterderran.	Burntisland.	Markinch.	East Wemyss.	Methilhill.	Buckhaven.	Leven.	Kirkcaldy Burgh.	Dunfermline Burgh.	Totals.
Clinics Visited ..	87	97	137	133	121	137	140	111	147	104	55	85	87	145	176	651	..	2,413
Head Vermin ..	3	8	..	..	..	..	..	..	5	25	2	..	..	..	..	3	6	52
Body Vermin ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ringworm (Scalp)	1	..	3	..	..	..	1	4	..	1	..	..	..	3	..	4	..	17
Scabies ..	12	4	6	..	7	11	16	3	11	..	..	3	..	..	16	20	45	154
Uncleanliness or Neglect ..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	9
Impetigo Contagiosa ..	93	31	41	49	94	42	134	121	176	57	36	61	152	55	81	666	389	2,278
Other Skin Conditions ..	7	3	7	4	18	2	21	21	..	9	12	7	10	19	18	48	655	861
Otorrhoea ..	12	20	23	9	38	12	50	23	14	8	1	15	32	30	46	151	115	599
Eye Diseases (Ext.)	19	37	27	27	41	7	82	51	46	27	49	19	98	37	56	215	335	1,173
Ear Cases ..	2	8	1	5	11	3	..	23	3	3	16	..	5	22	20	38	133	293
Nose and Throat Cases ..	..	22	10	4	4	..	..	..	1	8	8	..	1	21	2	18	295	394
Other Cases ..	97	470	1023	845	234	719	1087	663	196	403	113	358	325	328	228	2,030	2,941	12,060
Accidents ..	11	..	8	10	4	..	..	..	1	37	121	..	..	..	3	1	..	196
Advisory ..	..	..	5	8	47	..	..	..	4	46	12	..	..	21	7	18	..	168
Totals ..	257	607	1154	961	498	796	1391	909	457	624	370	463	623	536	477	3,217	4,914	18,254
Totals (1931-32)	231	251	1,084	1120	633	714	1,386	825	437	586	327	386	444	830	561	3,605	4,368	17,788

APPENDIX

TREATMENT (MINOR AILMENTS).

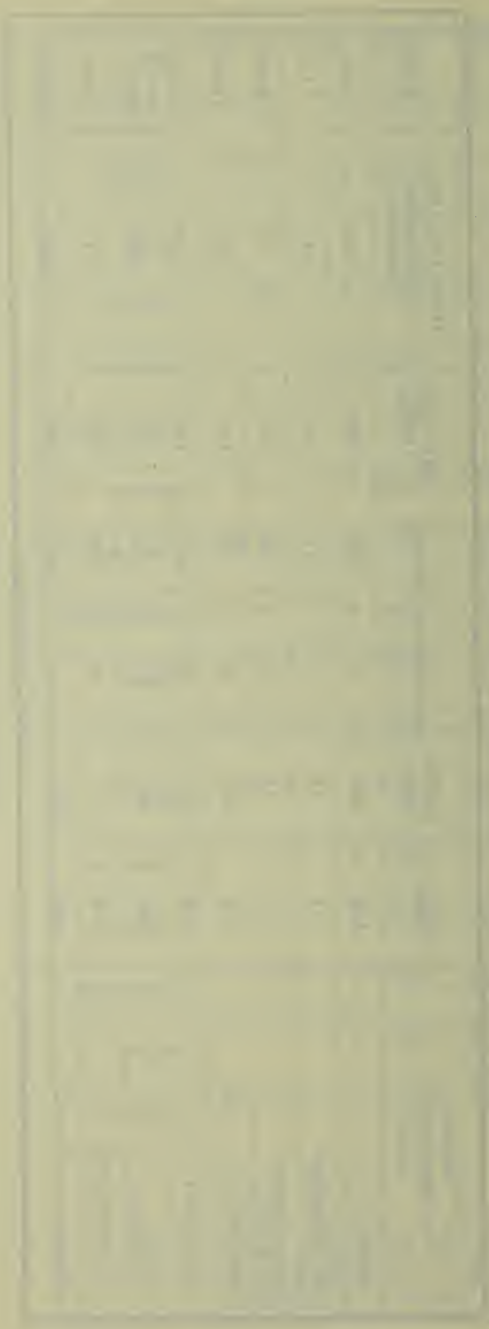
(b) CLINIC ATTENDANCES.

Condition.	Torryburn.	Blairhall.	Inverkeithing.	Crossgates.	Cowdenbeath.	Kelty.	Lochgelly.	Crosshill.	Auchterderran.	Burntisland.	Markinch.	East Wemyss.	Methilhill.	Buckhaven.	Leven.	Kirkcaldy Burgh.	Dunfermline Burgh.	Totals
Home Treatments	285	..	..	..	..	..	29	..	..	7	..	..	..	..	..	34	..	328
Head Vermin	17	33	..	..	..	..	..	..	42	128	4	..	..	..	..	3	6	233
Body Vermin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ringworm (Scalp)	6	..	52	..	..	..	19	127	..	219	..	..	..	60	..	46	532	1,061
Scabies ..	97	23	33	..	22	19	51	11	39	17	..	5	..	..	78	94	356	845
Uncleanliness or Neglect ..	..	3	..	..	..	..	..	..	5	..	..	..	..	..	..	113	..	121
Impetigo Contagiosa ..	1,408	107	450	467	501	361	1,064	601	1,410	191	268	234	1,071	195	470	2,915	2,794	14,507
Other Skin Conditions ..	77	28	76	265	70	28	97	88	..	19	108	..	39	74	87	268	7,610	8,934
Otorrhoea ..	204	224	899	274	884	864	646	526	349	81	39	222	771	423	1,030	2,768	2,768	12,972
Eye Disease (Ext.)	384	367	811	566	288	53	1,006	659	243	137	140	168	1,472	614	370	1,714	2,153	11,145
Ear Cases ..	123	16	2	29	26	108	..	37	3	8	27	..	9	22	104	46	781	1,341
Nose and Throat Cases ..	..	263	318	12	4	119	..	..	5	13	19	..	1	72	4	29	1,276	2,135
Other Cases ..	1,044	1,074	2,846	2,425	964	2,884	1,970	1,162	1,183	1,490	424	787	1,239	1,017	848	9,413	13,392	44,162
Accidents ..	44	2	16	10	4	7	..	..	1	74	326	..	..	..	3	1	..	488
Advisory Cases	..	..	1	8	47	22	..	..	4	78	13	..	..	..	7	15	..	195
Totals ..	3,404	2,140	5,504	4,056	2,810	4,465	4,853	3,211	3,284	2 455	1,368	1,416	4,602	2,477	3,001	17,425	31,668	98,139
Totals (1931-32)	3,279	2,163	5,495	5,899	3,184	3,592	4,149	3,438	3,502	2,643	1,413	2,382	4,701	4,236	3,456	17,507	28,163	99,202

APPENDIX II.

Table showing number of cases of Infectious Diseases taken from Head Teachers' attendance returns during the year 1933.

School Management Areas.	Measles.	Scarlet Fever.	Diphtheria.	Mumps.	Whooping Cough.	Other Infectious or Contagious Diseases.	Totals.
Cupar	118	136	5	207	187	335	988
St. Andrews	17	74	4	117	164	342	718
Anstruther	65	81	2	85	110	99	442
Wemyss	379	317	28	60	137	363	1284
Kirkcaldy	576	513	88	642	194	818	2831
Beath	289	630	102	188	200	1058	2467
Dunfermline	359	577	47	158	237	911	2289
Totals	1803	2328	276	1457	1229	3926	11919



Carnegie Dunfermline Trust.

ANNUAL REPORT

ON

THE TREATMENT OF SCHOOL CHILDREN

IN

DUNFERMLINE CLINICS

For Year ended 31st July 1933.

BY

HARRY EMSLIE SMITH,

M.D., Ch.B., D.T.M. & H., D.P.H.

Admistrative Medical Officer of the Carnegie Dunfermline Trust.

CONTENTS.

STAFF ENGAGED IN THE SCHOOL TREATMENT SERVICE :—

Administrative Medical Officer.

HARRY EMSLIE SMITH, M.D.. Ch.B., D.T.M. and H., D.P.H.

Consulting Aural Surgeon.

DOUGLAS GUTHRIE, M.D., F.R.C.S.

Dentists.

RICHARD V. P. CAMPBELL, H.D.D., L.D.S., R.C.S., Ed.
ROBERT WEIR, L.D.S., R.C.S., Ed.

Nurses.

A. E. BENNET. E. B. STENHOUSE.

Clerical Staff.

W. O. HALL. M. MCLAREN.

Clinic Attendants.

A. D. SMITH. E. D. MCLAREN. J. FRASER.
A. BANKS (Temporary).

	Old Burgh.	Rosyth.
Number of Schools, ...	10	3
Accommodation Places, ...	7858	
Number of Children :—		
(1) Average No. on Register, ...	6424	
(2) In Average Attendance, ...	5803	

INTRODUCTION.

The work in the Clinics has been heavy during the year. The number of school children attending shows an increase of five hundred and seventy-eight new cases with four thousand four hundred and fourteen attendances, as compared with last year.

An outstanding event was the establishment of a Defective Speech Clinic at Dunfermline. For some time the Carnegie Dunfermline Trustees have had under consideration the question of providing help to children handicapped by speech defects, and in November 1932, they decided to inaugurate a scheme with the object of ascertaining what could be done. The administration of the Scheme was placed on the Medical Welfare Department of the Trust, so that it might be run in connection with the Medical Treatment of School Children. Permission was obtained from the Education Committee for the children to attend during the day, and after a preliminary survey of the schools to ascertain the probable numbers, treatment was started in January 1933.

The idea of providing treatment for speech defects is a novel one, and much of the work has been experimental, but the results so far obtained have been very encouraging. The Trustees were fortunate in securing the services of Miss Margaret Fleming, whose report on the work is given in the body of this report.

In the Dental Clinics, the work has been effectively carried out. The dentists are responsible for both Inspection and Treatment of the children's teeth.

It is satisfactory to note that there has been an increase in the number of children attending both the Remedial and Sunlight Clinics

ARRANGEMENTS FOR MEDICAL TREATMENT IN THE DUNFERMLINE CLINICS.

The various departments of the School Clinic have been described in earlier Reports :—

See Fourth Annual Report (1909)—General Clinic.

See Fifth Annual Report (1910)—General and Dental Clinics.

See Sixth Annual Report (1911-12)—Eye and Remedial Departments

Under arrangement with the Fife Education Authority, the Carnegie Dunfermline Trustees took over the treatment of Rosyth school children as from September 1926, in which month they opened a General Clinic at King's Road School, and also provided dental treatment. In June 1929 the Trustees opened a General Clinic at Park Road School. The figures for treatment at Rosyth are shown separately in the following pages.

Minor Ailments (General Clinics), 1932-33.

During the year, 5,239 children of school age attended the General Clinics (Inglis Street and Rosyth), and the total attendances of these cases amounted to 35,115, being an increase over last year of 578 cases and 4,414 attendances.

Any child returning after a month's unprescribed absence was considered to be a new case, as were children returning after any interval with a different defect.

Return of Cases Treated.

	Inglis Street Clinic.			
	No. of Cases.		No. of Attendances.	
Ear—				
Middle Ear Suppuration, ..	73		1717	
Other Conditions, ...	64		463	
	——	137	——	2180
Nose and Throat—				
Nasal Conditions, ...	42		159	
Sore Throat, ...	101		176	
	——	143	——	335
Eye—				
Blepharitis, ...	40		444	
Styes, ...	53		356	
Conjunctivitis, ...	31		336	
Corneal Inflammation and Ulceration,	9		47	
Injuries, ...	16		43	
Errors of Refraction, ...	2		2	
Other Conditions, ...	10		90	
	——	161	——	1318
Skin (*Head*)—				
Dirty, ...	—		—	
Ringworm, ...	4		532	
Impetigo, ...	17		167	
Other Conditions, ...	20		288	
	——	41	——	987
Skin (*Body*)—				
Body Vermin, ...	—		—	
Impetigo, ...	197		1586	
Scabies, ...	21		254	
Ringworm, ...	7		244	
Other Conditions, ...	271		2909	
	——	496	——	4993
General—				
Septic Sores, ...	549		4402	
Injuries, ...	341		1867	
Other Conditions, ...	514		1152	
Sunlight, ...	319		3445	
	——	1723	——	10866
		2701		20679

Return of Cases Treated.

	Rosyth Clinics.			
	No. of Cases.		No. of Attendances.	
Ear—				
Middle Ear Suppuration, ..	42		1051	
Other Conditions, ...	69		318	
	——	111	——	1369
Nose and Throat—				
Nasal Conditions, ...	36		347	
Sore Throat, ...	116		594	
	——	152	——	941
Eye—				
Blepharitis, ...	49		339	
Styes, ...	69		264	
Conjunctivitis	43		192	
Corneal Inflammation and Ulceration,	1		4	
Injuries, ...	10		31	
Errors of Refraction, ...	—		—	
Other Conditions, ...	4		7	
	——	176	——	837
Skin (Head)—				
Dirty, ...	6		6	
Ringworm, ...	—		—	
Impetigo, ...	7		19	
Other Conditions, ...	23		215	
	——	36	——	240
Skin (Body)—				
Body Vermin, ...	—		—	
Impetigo, ...	168		1022	
Scabies, ...	24		102	
Ringworm, ...	1		1	
Other Conditions, ...	333		3953	
	——	526	——	5078
General—				
Septic Sores, ...	618		3093	
Injuries, ...	572		2097	
Other Conditions, ...	347		781	
	——	1537	——	597
		——		——
Totals—Rosyth Clinics, ...		2538		1443
Add—Inglis Street Clinic Totals, ..		2701		2067
		——		——
Total No. of School Children, ..		5239		3511
Add—Children below school age, ..		353		309
		——		——
Grand Total, ...		5592		3821
		——		——

DISEASES OF THE EAR, NOSE AND THROAT.

The arrangements made for the treatment of cases suffering from diseases of the Ear, Nose and Throat during the year ending 31st July 1933 were similar to those of last year. Treatment was given at all Clinics, the more detailed investigation of cases being carried out at Inglis Street.

The Consulting Aural Surgeon, Dr. Douglas Guthrie, visited Inglis Street Clinic once a month during school terms.

All new cases applying for treatment were in the first instance referred to their own family doctor.

Attendances.—The total number of school children who attended at Dunfermline and Rosyth Clinics on account of diseases of the Ear, Nose and Throat was five hundred and forty-three. As compared with last year, this represents a total increase of one hundred and five cases, forty-three being at Inglis Street, and sixty-two at Rosyth.

In addition to the above, thirty-one cases among children of pre-school age were treated as compared with seventeen last year.

The work in the Ear, Nose and Throat Clinics has been heavy. The total number of attendances for treatment amounted to 5,012.

The following table shows the distribution of new cases :—

	Inglis St. Clinic.	Rosyth Clinics.	Pre-School Age.
Ear, ...	137	111	25
Nose and Throat, ..	143	152	6

Of the two Clinics at Rosyth, King's Road showed the largest number of new cases suffering from affections of the nose and throat. The number of ear cases were about the same in both.

I. Affections of the Ear.

Two hundred and forty-eight school children attended the Clinics at Dunfermline and Rosyth on account of diseases of the ear, an increase of 36 new cases. The number of treatments given was 3,549.

Otitis Media.—One hundred and fifteen cases of middle ear suppuration were treated.

In last year's Report, the Consulting Aural Surgeon noted that :— " The term ' chronic ' is justified if the discharge has persisted for two months." By this standard, only some twelve cases of acute otitis media were met with during the year. All the others were classed as " chronic."

The treatment of Chronic Otitis Media depends to a large extent on the effective removal of purulent discharges from the region of the ruptured drum. Few parents, however, have the skill to do this, and even in the case of those who have, the reluctance of their own child too often prevails. The best results are got when dressings are regularly

carried out by nurses trained in the necessary technique. It is for this reason satisfactory to note that the figures show an increase of twenty-seven cases seeking treatment at the Clinic.

The removal of septic tonsils was carried out with good results in several of the cases.

Inflammation of the External Acoustic Meatus.—Thirty-five cases of Furunculosis in the external auditory canal were treated. There were fewer of these cases than in the previous year.

Other Affections of the Ear.—Ninety-eight cases of other affections were treated. They include cases of wax, foreign bodies in the ear, deafness from various causes, and other injuries or defects.

II. Affections of the Nose and Throat.

Two hundred and ninety-five cases of diseases of the Nose and Throat attended during the year, an increase of sixty-nine cases over last year's figures.

The number of acute sore throats met with was double that of last year. It will be seen from the following table that most of these were at the Rosyth Clinics.

	Inglis Street Clinic.	King's Road Clinic.	Park Road Clinic.
Nose—			
Catarrh, ...	9	6	3
Other Conditions, ..	33	10	17
Throat—			
Acute Sore Throat, ..	6	19	20
Other Conditions, ..	95	50	27

Tonsils and Adenoids.—Ninety-six cases of morbid enlargement of the Tonsils and Adenoids were treated. This number is practically the same as last year. Conservative methods of treatment were adopted wherever possible. These consisted mainly in painting the throat at the Clinic, courses of artificial sunlight, and efforts to improve the general health which in some cases necessitated a holiday at Bandrum Country Home. The results obtained were good.

Removal of the tonsils or adenoids was advised in thirty-six cases. Several of the cases were sent back by their family doctors for a course of post-operative breathing exercises at the Remedial Clinic. Even after the nose has been cleared by operation, the habit of mouth-breathing often remains, and so long as it does, there is always a risk of the nose again blocking up. The whole question of mouth breathing is an important one. It has been said that if mouth breathing is cured, it will be seldom necessary to operate for adenoids. This is perhaps too optimistic, but the aid which remedial methods can give in helping to overcome the habit of mouth breathing is well worth the trouble involved.

In connection with the recently instituted treatment for stammering nd defective speech, the throats of all of the children were examined efore commencing work under Miss Margaret Fleming.

Children of Pre-School Age.—Thirty-one cases of infants and hildren of pre-School age were referred to the Clinic for treatment by heir own doctors.

The following table shows the diseases for which they were treated:—

Middle Ear Suppuration, ...	21
Other affections of the Ear, ...	4
Affections of the Nose, ...	1
Affections of the Throat, ...	5
	31

The total attendances of children of pre-school age were one hundred nd eighty-seven.

REPORT BY DOUGLAS GUTHRIE, M.D., F.R.C.S., CONSULTING AURAL SURGEON.

To the excellent and detailed statement of Dr. Emslie Smith, there s little to add.

As he has stated in his report, there have been over five thousand ttendances at the Clinic for the treatment of affections of the Ear, Jose and Throat and the results have been very encouraging.

Two Important Methods of Treatment.—With reference to that ery common disease, middle ear suppuration, too great stress cannot be aid upon the importance of thorough and regular cleansing of the ears o as to remove discharge and promote drainage. The introduction of ar " drops," such as peroxide of hydrogen, is of infinitely less value han this preliminary ritual of removing all trace of discharge from the ar canal.

The second point in the report upon which stress should be laid is he necessity for re-establishment, by suitable exercises, of correct reathing after operations for removal of adenoids and tonsils. This hould be insisted upon in every case, as the habit of mouth-breathing as often become so well established that the mere removal of the ause is insufficient to cure the habit, and in any case a course of reathing exercises will be of great value to the child in whom correct reathing has previously been rendered difficult by the presence of denoids.

Establishment of a Speech Clinic.—A most important addition o the work of the Clinic has this year been made in the establishment f a Centre for the treatment of children suffering from defects of speech. his work has been undertaken by Miss Margaret Fleming, and already he results which she has obtained fully justify the new venture. On

my visits to the Dunfermline Clinic, I have regularly called to inspec Miss Fleming's classes, and have examined all the children who hav been under her care.

The need for the corrective treatment of speech defects must b obvious to all who are in touch with educational work. In this countr at least two per cent. of all school children suffer from defective speec which naturally interferes with the child's education and social activiti and, if untreated, may persist into adult life and impair his usefulne as a citizen. While there are many varieties of speech defect, stutterir or stammering is by far the most frequent. Miss Fleming has alread treated twenty-one cases of this nature at the Clinic, and has achieve considerable success. She encourages her pupils to avoid tension, t practise rhythmic breathing, and to re-establish the self control whic is so necessary for correct speech. She has been notably successful securing the co-operation and support of the parents of the childre in carrying on this important service. The success of the Spee Clinic must largely depend upon the goodwill of the parents, doct and school teachers, and every effort should be made to give to th new department a wide publicity.

(Signed) DOUGLAS GUTHRIE, M.D., F.R.C.S.

DEFECTIVE SPEECH CLINIC.

This Clinic was established by the Carnegie Dunfermline Truste with a view to providing assistance to children to enable them to ove come defects of speech.

Before commencing treatment, each child was medically examin to detect any defects which might cause impediment.

The work of speech remedial training was carried out by Miss Ma garet Fleming in a large room, at the Clinic, particularly well suited f the purpose. Parents were encouraged to accompany their childre in order to secure the necessary home co-operation.

Stress was laid on the individual training of each child, but as t work progressed, it was sometimes found advantageous to deal wi small groups of three or four together.

The work was commenced only in January 1933, but the resu obtained during the short time covered by this Report have been m promising. Several of the cases have been discharged, having ma good progress and been put on the right lines. Of these, some ha enrolled in Elocution Classes, others return periodically to rep progress.

Miss Margaret Fleming's report on the work is attached.

REPORT BY MISS MARGARET FLEMING ON THE WORK OF TH DEFECTIVE SPEECH CLINIC FROM JANUARY TO JULY, 1933.

The work done among the children suffering from stammering a other speech defects has proved most interesting. So far, the work h

een largely experimental, but the results have been very encouraging. ttendance has been most regular, and the children keen and enthu- iastic in their work. Altogether, the atmosphere has been a most appy one.

Several cases of **Defective Articulation** among the very young children ave been dealt with, and when sufficient progress has been made, these ave been discharged, further development being left to parents and chool teachers.

The **Stammering Cases** have varied as regards severity, and it is nteresting to find that the most marked improvements have been oted among the very worst sufferers, the reason for this no doubt eing that, whereas the occasional stammerer inclines to trust to luck, he really bad stammerer who is in earnest relies all the time on the nethod he has been taught to carry him through. Good habits are hus more quickly and thoroughly acquired. A case in point is that of little lad of nine years, a bad and constant stammerer all his life, who n two months' time is so master of himself, through grit, perseverance nd knowledge as to be able to read successfully at first sight from the aily paper, and who tells you with pride that his school teacher says e is a "fraud"! It must be borne in mind that strength of character an important factor in the cure of stammering—"therein the patient ust minister unto himself"—and unless the pupil is an earnest and ainstaking worker, outside guidance can be of little use.

The need for co-operation of parents and school teachers cannot be o strongly emphasised, particularly when the child has reached the age of being able with care to speak without stammering. Then he ust be firmly but kindly dealt with, and **no speaking other than areful be accepted.** Children are not saints, novelty soon wears thin, ld habits are easier than new, and unless constantly guarded and ncouraged, the stammerer is inclined to slip back into old ways.

It has been found successful to take the children twice weekly in roups of three or four. A greater number is not desirable, although at mes it has to be taken.

As stammering, whatever the cause, means lack of co-ordination in he various working parts of the speech machinery, the greatest im- ortance is attached to the practice of rhythmic breathing, and the evelopment of self-control and co-ordination along all lines.

Return of Cases Treated.

	No. of Cases.	No. of Attendances.
Stammerers, ...	21	371
Minor Defects, ...	6—27	60——431

EYE CLINIC.

During the year which ended on 31st July 1933, three hundred an thirty-seven school children attended the Eye Clinics at Dunfermlin and Rosyth. The number of attendances was 2,155, and the averag number of treatments per case was 6·3. These figures represent a increase of 17 new cases and 289 treatments, as compared with las year.

In addition to the above, thirteen children of pre-school age attende and received three hundred and seventy-six treatments.

There were no epedimics of eye disease during the year, but there wa an increase in the number of conjunctivitis and styes. The former wa distributed throughout the year ; the bulk of the latter occurred durin the months of October, May and June. Cases of styes and sept conditions about the eyes are often associated with warm and d weather such as was prevalent during the year.

In general the cases were of a rather more severe type than last yea and the average number of treatments per case was correspondingl higher.

The following table shows the distribution of the cases, and the ma classes of defects treated :—

	Dunfermline.		Rosyth.	
	Pre-School Children.	School Children.	King's Road Children	Park Ro of School Age.
Blepharitis	2	40	16	33
Styes	3	53	27	42
Conjunctivitis	6	38	19	24
Injuries	..	16	4	6
Refractions and other conditions	2	14	3	2
Total	13	161	69	107

Styes.—In point of numbers, styes head the list of diseases treat during the year. There were one hundred and twenty-five cas Several of them were very acute with marked oedema of the eyelic but the majority of them were of the usual type and recovered well.

Conjunctivitis.—Eighty-seven cases of all types of Conjunctivi were treated, an increase of twenty over last year's figures.

Ten cases of Phlyctenular ulcers were seen. Most of the cases were a mild type, and responded well to treatment.

In view of the fact that Conjunctivitis is so often associated wi malnutrition and debility, it is satisfactory to note that the number these cases has been so low of late.

Blepharitis.—Ninety-one cases were seen. This represents decrease of sixteen cases, which was rather to be expected, as the nu ber of cases of Conjunctivitis last year was low, and few were of a seve character.

The practice of examining the visual acuity of all chronic or relapsing ases of Blepharitis and of prescribing glasses to relieve eye-strain was ontinued.

Other Conditions include cases of injury, corneal ulceration, oreign bodies in the eye, etc. None of them requires special remark.

Defective Vision.

The routine examination of school children for errors of refraction is ow carried out by the School Medical Inspection Staff.

SKIN DISEASES.

There was an increase of work in the Skin Departments at all of the linics during the year which ended on 31st July 1933.

The total number of new cases of skin disease in school children was ,099, and the number of treatments given was 11,298. This represents n average of 10·02 treatments per case.

Compared with the previous year, the figures for all the Clinics show n increase of 150 new cases and 1,555 treatments.

The number of skin affections in children attending King's Road and ark Road Clinics was exactly the same, and the total of the Rosyth ases was practically the same as at Dunfermline.

Children of pre-school age are treated at the Clinics on the recom- iendation of their family doctors. Eighty-seven of these cases attended ringing the full total of all cases during the year to 1,186 and the umber of treatments to 12,302.

Impetigo Contagiosa.—Impetigo still accounts for the largest umber of cases of skin disease among children attending the Clinic. his is, of course, usual as the disease is the most common skin affection f children. It is interesting, however, to note that although the total umber of skin cases shows an increase, the number due to Impetigo as slightly less than last year. The drop in itself is not large enough o be of any significance, but it is a hopeful sign and worthy of record, iat during the year, far more parents attended the Clinic showing oncern about their child's condition. Remarks such as " I was afraid might be Impetigo,"—" It's such a dirty disease " were quite common id it is hoped indicate a change of attitude from the complacent view iat Impetigo is almost a normal condition. Such a change would be l to the good. The co-operation of parents and teachers in reducing ie incidence of Impetigo is essential. The disease is highly infectious, id early recognition and treatment is the best means to prevent spread. 389 school children were treated, and accounted for 2,794 attendances. f these, 214 were in Dunfermline, and 175 in Rosyth Schools.

There were only 24 cases of Impetigo of the Scalp.

In general the cases were of rather a mild character, although there as a tendency in some to septic complications with enlargements of ands. A good many were seen at a satisfactorily early stage.

Group 2—Ringworm of the Head and Body.—Eight cases o Ringworm of the body and four cases of the scalp were treated durin the year. These figures are the same as last year.

Three of the cases of Ringworm of the body occurred in the month c September after the Summer holidays. The cases in which the scal was affected were treated over a long period, and are still being kep under observation—relapse being so common in this type of disease The use of Ultra Violet light with a Wood's filter has proved of th greatest service.

Group 3—Warts, Chilblains and Corns.—Three hundred an thirty-three cases were treated during the year, being an increase c forty-four cases over last year's figures. Of these, two hundred an thirty-five were cases of warts, many of them being of multiple affectio

Attention has been drawn in recent reports to the large number c children who suffer from warts. This year the number of cases treate shows a slight increase, particularly in the Old Burgh. No localise epidemics were noted in connection with individual classrooms as w the case last year.

Group 5—All Other Conditions :—

(1) Vermin of the Head and Body.—No cases of Body Vermin a only six cases of Nits and Pediculi of the head were treated at t Clinics during the year. Cases of vermin in school children are no dou dealt with by the School Medical Inspection staff, but it is satisfacto to note that the number of these cases requiring Clinic treatment co tinues to remain so low.

(2) Molluscum Contagiosum.—There was a very considera increase in the number of cases of Molluscum Contagiosum. Fort three were treated which was nearly double last year's figure. Over per cent. of the cases occurred in the Old Burgh. The cases in the selves were of a more severe type, very many being multiple, an considerable number in an inflamed and spreading condition.

(3) Scabies.—Only fourteen were treated. It is satisfactory to n that there has been a continued fall in the number of cases of t disease during the last three years.

Other Conditions treated include cases of Seborrhoea—of wh there was a large number—Herpes, Alopecia, Ichthyosis, Dermati and other skin affections.

Children of Pre-School Age.—In addition to the above, eigh seven cases of skin diseases in infant and children of pre-school a were referred to the Clinic for treatment by doctors during the year

The following table shows the diseases and the numbers treated -

Ringworm, ...	3
Impetigo, ...	37
Scabies, ...	14
Other Conditions, ...	33
	87

Defective Teeth

THE FOLLOWING IS THE REPORT ON THE WORK OF THE SCHOOL DENTIST IN THE OLD BURGH :—

The work is carried out by Mr. Weir and Mr. Campbell jointly.

Dental Examination.

The age groups examined during the year extended, as in previous years, from 5 to 13 years. The total number of children examined was 3,082. This was 152 less than last year, and 66 less than two years ago.

The following table shows the number of children examined in each group, together with the number of children whose dentitions were found in the corresponding group :—

	No. Examined.	No. with Sound Dentition.
At 5 years	310	24
„ 6 „	459	76
„ 7 „	392	106
„ 8 „	413	144
„ 9 „	413	164
„ 10 „	447	218
„ 11 „	434	225
„ 12 „	169	95
„ 13 „	45	20
	3082	1072

This gives a percentage of 34·8 of the children examined having sound dentition.

The following figures show the general state of the teeth as disclosed by the examination, and the numbers accepting and refusing treatment :—

	1932-33.	Per cent.	1931-32 Per cent.
1. Examined	3,082	..	..
2. With Sound Dentition	1,072	34·78	30·98
3. Requiring Treatment	2,010	65·22	69·01
4. No. in 3 accepting Treatment at Clinic	1,557	77·47	78·31
5. No. in 3 refusing Treatment at Clinic	453	22·53	21·68

It is observed that the percentage of those accepting treatment ha now been for several years practically the same, about 77 per cent., afte rising from about 70 per cent. in the previous years. The following i a comparison of the percentage of acceptances during the last seve years :—

1932-33	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27
77·47	78·31	79·21	77·02	76·76	74·0	71·85

In the following table the 3,082 children examined are classifie according to the number of decayed teeth in the mouth :—

No. of Decayed Teeth.	No. of Children. Boys.	Girls.	Total.
0	565	507	1,072
1	266	243	509
2	217	211	428
3	102	116	218
4	129	134	263
5	56	62	118
6	76	77	153
7	28	30	58
8	23	27	50
More than 8	106	107	213
	1,568	1,514	3,082

Dental Treatment.

During the year, 2,960 children attended the Clinic, and made 4,2 attendances, an average of 1·43 attendances per child. There is a increase of 44 in the number of children attending the Clinic, and a increase of 143 in the number of attendances made. 2,485 childr attended the Clinic as the result of the systematic inspection, and 4 were treated as casual cases. The casual cases are children outwi the age groups inspected, or children who are attending Queen An School or the High School.

The following figures show the treatment carried out throughout t year :—

	Temporary Teeth.	Permanent Teeth.
Extractions—		
Without Local Anaesthesia	2,334	2
With Local Anaesthesia	1,449	503
Fillings—		
Cement	241	3
Amalgam	505	2,267
Silicate	..	439
Root Fillings	..	36
Other Operations—		
Silver Nitrate Treatment	2,320	15
Dressings Inserted	..	533
Scaling and Cleaning	..	867
Porcelain Crowns	..	5
Minor Regulation Visits	..	14

The total amount of treatment carried out throughout the school year, together with a comparison of the corresponding figures for the previous year, was as follows :—

	1932-33	1931-32.
Teeth Extracted	4,288	3,401
Fillings Inserted	3,491	3,388
Teeth Treated with Silver Nitrate ..	2,335	2,534
Dressings Inserted	533	263
Scaling and Cleaning	867	977
Porcelain Crowns	5	8
Minor Regulation Visits	14	6

REPORTING ON THE WORK AS SCHOOL DENTIST IN ROSYTH, Mr. RICHARD CAMPBELL STATES :—

Commencing in September, the age groups, 6, 7, 8, 9, 10, 11, 12 and 13 underwent systematic dental examination.

Dental Treatment.

During the year, 1,011 children attended the Clinic, and made 1,585 attendances, an average of almost 1·57 attendances per child. 805 of the children treated came as the result of routine inspection, and 206 children were treated as casual cases.

The following figures show the treatment carried out throughout the year :—

	Temporary Teeth.	Permanent Teeth
Extractions—		
Without Anaesthesia	593	3
With Local Anaesthesia	874	182
Fillings—		
Cement	52	—
Amalgam	137	385
Silicate	..	47
Root Fillings	..	3
Other Operations—		
Silver Nitrate Treatment	662	5
Dressings Inserted	..	158
Scaling and Cleaning	..	474
Porcelain Crowns Inserted	..	..
Minor Regulation Visits	..	13

The total amount of treatment throughout the school year was as follows :—

Teeth Extracted	1,585
Fillings Inserted	624
Teeth treated with Silver Nitrate	667
Dressings Inserted	158
Scaling and Cleaning	474
Minor Regulation Visits	13

Operations.

Cases requiring major operative measures are not dealt with at the School Clinic. They are referred to the family doctor for the necessary treatment.

Deformities and other Conditions treated at the Remedial Clinic.

The outstanding feature with regard to this Clinic during the past two years has been the vast increase in the number of cases seeking admission. In last year's report, it was noted that the number of children treated was, with one exception, more than double that of any year since 1914. This year the numbers show a slight increase.

The causes which contributed to the increase in 1932 were discussed in some detail in the report of that year. These causes still obtain, and it is hoped that this may be taken as a good augury for the future of the "Remedial"—one of the first Clinics to be established by the Carnegie Dunfermline Trustees.

The Clinic was opened in August 1906, and since that date has continuously provided relief to the cripple and physically defective children of the community.

Working Arrangements.—Children suffering from physical defects or from the results of sprains, fractures or injuries, and from defective habits of posture, are eligible, a recommendation for treatment from the family doctor being the only essential.

On admission, each case is medically examined, and a suitable table of massage and remedial gymnastic exercises is drawn up. The cases are frequently examined, and the tables altered from time to time according to the progress of the case.

Treatment is carried out in the Remedial Gymnasium which forms part of the Inglis Street Clinic. The Gymnasium is specially designed for the purpose, and is well equipped. During the year under review provision was made by the Trustees for such additional equipment as had become necessary on account of the large numbers.

The Clinic was open after school hours on Mondays, Wednesdays and Fridays throughout the College year.

Staff.—In a Remedial Clinic, much of the work consists of Massage and Medical Gymnastics. The essential feature is the intelligent application of these methods to the individual case. This implies a sufficient number of trained assistants. In this Clinic, the Senior Women Students of the College of Hygiene and Physical Education supply the skilled assistance and carry out their work under the supervision of Miss Whyte and Miss Armstrong.

During the past two years, the duties have been exceptionally heavy, and it is a source of very great pleasure to record one's high appreciation of the satisfactory way in which they have been performed by all.

Much thanks are due to Miss Drummond, the Principal of the College, for her constant help which has so much facilitated the work of the Clinic.

Attendances.—During the year which ended on 28th June 1933, 184 cases were admitted. The total attendances was 4,955, and the average number of treatments per case was approximately 27. These figures represent a slight increase in the number of cases admitted and a decrease in the number of attendances. This decrease is accounted for by the Influenza epidemic which occurred in the early months of 1932, when the attendances fell considerably.

Defects Treated.—Many of the patients were found to be suffering from more than one defect. For example, it was a common experience to find cases of debility suffering from both postural and spinal curvature and flat feet, or cases of Poliomyelitis or Rickets with other defects due to imperfect development or to a yielding of the bones.

In the following table the cases have been grouped only under the heading of major defect :—

Defects.	No. of Cases.
Antero-Posterior Curvature of the Spine	28
Lateral Curvature of the Spine	16
Paralysis	17
Flat Foot	38
Club Foot	9
Sprains, Fractures and Injuries	31
Rickets and Debility	9
Other Conditions	36
	184

Curvature of the Spine.—Of the cases of Antero-Posterior Curvature, there were sixteen of Kyphosis and seven of Kypho Lordosis. About half of these cases were due to debility from various causes.

The results of treatment were good. Nine were discharged " cured," and seven showed very marked improvement. Only four of the cases are classed as showing " no change," two of which had been irregular in attendance.

Remedial methods give satisfactory results in early cases due to purely postural causes, and even in cases due to debility, provided the debility is not too severe. It does not as a rule take long to teach a child a good posture, but it is a pity that so many regard it as a virtue only for exhibition in the Remedial Gymnasium. Habits are difficult to cure, a truth only too well appreciated by those engaged in remedial work.

A few cases of round shoulders in adenoid type of children were treated during the year. The stooping posture in association with adenoids is well known. For this condition, remedial methods might perhaps be more often used than at present.

In addition to the above, five cases of Kyphosis and Round Shoulders due to Asthma were treated. One was discharged " cured " and three showed great improvement. Remedial methods do not cure Asthma, but it is interesting to note how much some of the children appreciate the relief they give to the discomfort, and with what regularity they return for treatment after each successive acute attack.

Scoliosis (16 cases).—About half of these were early postural cases, which were comparatively easily corrected. Four cases were of the second degree, and four of the more severe third degree in which the chief aim of treatment is the prevention of more serious deformity.

Three of the cases were discharged " cured," and six showed great improvement. Only two of the cases showed no improvement. Pain was a feature in some of the cases, and the results of treatment in this respect were satisfactory.

Paralysis (17 cases).—These cases may be classified as follows :—

Infantile Paralysis	10
Birth Paraylsis	3
Spastic Paraplegia	2
Post Diphtheritic Paralysis	1
Nerve Injury	1

Results.—The case of Post-diphtheritic Paralysis was cured, and nine of the others showed marked improvement. One of the cases of Infantile Paralysis was able to discard its leg irons. Successful operations were performed on two others by their family doctors.

The treatment of Paralysis is always a lengthy process, and demands considerable perseverance on the part of both patients and those in charge of the case, but the results are a compensation for the trouble involved. Several of the cases have been under treatment for years, and although the results each year may not be spectacular, it is certain that but for the systematic treatment they have received, their condition would be very much worse.

Flat Foot (38 cases).—Attention is again drawn to the importance of Debility as a cause of Flat Foot. The statistics for the last two years suggest that, among children at least, it is the most important cause. Several of the cases seen during the year under review were the result of debility following a recent illness, and it is not uncommon to find during treatment an aggravation of the condition as a result of some intercurrent illness or debilitating influence.

Of the thirty-eight cases treated during the year, the causes of the defect may be grouped as follows :—

Debility	25
Heavy Children	8
Rickets	2
Congenital	3

When one reflects that the erect position of the body depends on the health and vigour of the muscles, it is not surprising to find debility ranking so high as a cause of flat foot. Most children convalescent after illness and weakly children who suffer from tired legs and painful feet are possible cases of early Flat Foot. It would be well if the value of remedial methods was more widely recognised in the treatment of such cases. Unfortunately, the mere recovery from a debility does not always mean the recovery from the flat footed state.

The work in this Clinic rather emphasises the importance of the whole subject of Youthful Flat Foot. Quite apart from the pain so often occasioned in the early stages, a flat footed child may grow into an adult with defective feet and all that that implies in the way of pain and discomfort. It has been estimated that over 60 per cent. of school children show evidence of Flat Foot. Certainly a large number do. The treatment of Youthful Flat Foot may well prove an important measure in the prevention of adult foot troubles so common at the present day.

Of the results of treatment, fourteen cases were discharged " cured," seven showed " great improvement." In only five cases there was no improvement noted.

Club Foot.—Nine cases of club foot were treated. In four of these operative treatment was carried out with good results.

Sprains, Fractures and Injuries (31 cases).—Thirty-one cases due to different kinds of injury were treated. Of these, there were eighteen sprains, six fractures or dislocations, and seven cases of other injuries. As usual in such recent traumatic cases, the results were good.

Rickets and Debility (19 cases).—Fourteen cases of Rickets were treated during the year. Four of these were suffering from bow legs, one from knock knees, and five from deformity of the chest. The effects of an attack of Whooping Cough in bringing about deformity of the chest was noted in several of the cases. Four cases of simple Rickets and five of general debility were also treated by general strengthening methods. In these cases, Artificial Sunlight was combined with the remedial treatment with good results.

Other Conditions.—These include eight cases of Rheumatism of different types, three cases of torticollis (one of which was the result of extensive scar tissue formation on the neck and which recovered well), eight cases of depressed sternum or pigeon chest, chorea, congenital dislocation of the hip, tuberculous affections of joints, contracted tendons, and several cases for breathing exercises after operation for the removal of tonsils and adenoids.

Debility and Malnutrition.

In connection with School Medical Inspection and work in the Clinics, there are always a certain number of children found whose health is below par and who are not normally thriving. It has been the practice for some years now to refer such cases to the Debility and Malnutrition Clinic, which affords a better opportunity for their examination.

Two hundred and twenty-four cases were examined during the year, an increase of only five as compared with the year before. Of this number, 108 attended schools in Dunfermline, and 116 attended schools in Rosyth. These figures represent an increase in the Rosyth cases, and a decrease in those of Dunfermline. It should be noted that thirty-five of the cases examined were convalescents from recent illnesses which had reduced the child's strength to an unusual degree. Many of them were the result of an outbreak of Influenza, and were of a more or less temporary character.

In general it may be said that the cases were not of a particularly severe type, and that on the whole there seemed rather less genuine Debility and Malnutrition in school children than in recent years.

The chief conditions found to be associated with debility in the cases seen are grouped as follows :—

	No. of Cases.
Frequent colds and attacks of Bronchitis or Asthma ..	22
Poor resistance to septic infection with frequent attacks of boils, sores and styes	17
Insufficient or unsuitable Food	9
Unsatisfactory home conditions, irregular meals, lack of sleep, etc., ...	31
Tuberculosis, either of the nature of a pre-disposition to tubercular disease or in the form of affected glands of the abdomen, thorax or neck	39
Rheumatism with or without affection of the heart and anaemic	16
Septic Tonsils	10
Rickets	2
Convalescent after Illness	35
Other Conditions	43

In regard to treatment, a residence at Bandrum Country Home a usual proved by far the most effectual measure available. A grea many of the cases were transferred there for periods of six weeks an longer with excellent results.

Artificial Sunlight treatment also proved of great value in many c the cases, and Chemical Food, Malt, or Cod Liver Oil was given t those whose defect indicated the need of such additions to their diet.

Children of Pre-School Age.—In addition to the above, eleve children of pre-school age were examined during the year. The included cases of Rickets, Tubercular disease, poor resistance to sept

affections and Bronchitis. All of the cases were referred to their family doctors, and some of them were transferred to Bandrum at their doctor's request.

Artificial Sunlight Clinic.

The Artificial Sunlight Clinic was open most of the year, but the bulk of the cases were treated during the Autumn, Winter and Spring seasons.

The work has been heavy ; there was a considerable increase both in the number of new cases, and in the number of treatments given as compared with last year. This increase is interesting, when one reflects that the wave of enthusiasm which made " Sunlight " so popular a few years ago has more or less spent itself. Formerly a spirit of curiosity no doubt prompted a good many parents to bring their children for treatment, but this is no longer true. Children are now brought because their parents—often from previous experience—know of the good it will do them. " Sunlight " has ceased to be " something new." One no longer hears extravagant claims about it, but experience is gradually revealing its use. This is all to the good, for there is no doubt that in suitable cases, it is of immense value.

A detailed account of the equipment and accommodation of the Clinic was given in the Annual Report for 1931. No important changes were made during the current year.

Attendance.—During the year under review, four hundred and four children were treated, viz :—

Boys	167
Girls	152
Infants and children under School age	85
Total	404

The number of treatments given was 4,326.

These figures represent an increase of ninety-six new cases, and seven hundred and eighty-eight treatments, as compared with last year.

The attendances were very regular throughout. The number of parents who accompanied their children was greater than ever, and their expressions of appreciation most emphatic.

Results.—The classification of results is not altogether a simple matter when dealing with large numbers of different affections in children of widely varying constitutions. No single standard can be applied to all. The method adopted was that used in former years. It is based on (1) the degree of improvement in the morbid condition on account of which the child attended ; (2) on the observation of a

general improvement in the child's health ; and (3) on information received from parents and guardians concerning the child's improvement in vitality, appetite, sleeping, etc., etc.

With regard to No. 2, a general improvement in health shows itself in many ways—a better colour and more healthy condition of the skin and hair, alert expression and movements, decrease in size of glands—so often enlarged—to mention only a few. Increase in weight does not always go hand in hand with a gain in health. It has been noted over and over again that children with a small focus of disease such as a gland of the neck, rarely put on weight until that focus has ceased to be active, although their general health has quite evidently improved.

Records of weight of the children undergoing treatment were kept, and although the numbers are too small to admit of definite conclusions being drawn, the results are interesting. Sixty-four boys and girls of school age were treated for " Debility and Malnutrition." The average gain in weight for these cases works out at rather over 7 lbs. per annum, which is higher than the normal gain for children of a corresponding age. The average in girls was greater than in boys. In the cases of " Bronchitis," the gain was still more marked.

The results of the year's work are summarised as follows :—

	Per Cent.
1. Cases showing no change	15
2. Improved	20
3. Greatly Improved	45
4. Cured	20

The above figures are very similar to those of last year. Some of the cases had only received a few exposures before the end of the year under report.

Debility and Malnutrition.—This group includes children who were not thriving, or not normally gaining weight and strength, children suffering from the results of illness or defective hygienic or poor home conditions as well as children with a pre-disposition to tubercula affections.

The group is a large and important one. Forty-seven boys, forty-nin girls, and twenty-one children of pre-school age were treated. Ten boys, eleven girls and three children of pre-school age were grouped a having a tubercular predisposition.

The results obtained by the end of the year were as follows :—Eigh children had been discharged during the year as " cured." Sixty wer classed as " Greatly Improved " and twenty-eight as " Improved."

The type of case in this group is one very frequently met with i Clinic work, and is often rather a problem.

Considering the fact that all of these cases were much run down i strength from one cause or another, and that over 82 per cent. of the

showed some benefit, while more than half of them were markedly improved or cured, the results of the treatment must be considered most satisfactory.

Increased appetite with improvement in general vitality and sleeping were again features of the improvement in health noted by parents. Reference has already been made to the gain in weight of these cases.

Bronchitis.—Frequent colds and recurrent attacks of Bronchitis are very common among young children. They occur so often at a critical age, and interfere with the healthy development of the child in many ways. Not infrequently they indicate something more serious.

The experience at this Clinic has been that artificial sunlight is of definite value in the treatment of this class of case. Certainly there appears to be no doubt about this in the minds of the parents and guardians of the children.

Thirty boys, twenty-four girls and fourteen children of pre-school age attended. Of these, thirteen were discharged "cured," twenty-six "greatly improved," and sixteen "Improved." Several of the cases had attended for courses of treatment in previous years. The average gain in weight was most satisfactory.

Asthma.—Only nine cases of Asthma were treated during the year. No opinion as to the value of Sunlight in this affection can be based on such small numbers. It did not appear to have any direct effect on the condition, but several of the cases were quite definitely of the opinion that it gave some relief. No doubt the general tonic effect helped.

An interesting case might be mentioned of a child who gave a history of being definitely sensitive to Beans, the eating of which was followed some three hours later by a sharp attack of Asthma. Artificial Sunlight seemed to help the condition, in that after a time he was able to take test meals of peas and beans with no subsequent asthma, and later with only a slight attack following the eating of baked beans on two consecutive days—an effort hitherto quite beyond his powers, according to his mother. His weight increased 3 lbs. in about four months.

Adenitis.—Forty-seven cases of enlarged glands in school children, and nine in infants or children of pre-school age was treated during the year. Of these, twenty were cases of Tubercular origin. Artificial Sunlight has proved of real value in the treatment of this class of case, and the results obtained were most satisfactory. Tubercular cases, of course, take very much longer than do cases of simple adenitis. Some of them had previously been under treatment.

Rickets.—Thirty-three cases of Rickets were treated. This represents an increase of eleven cases over last year's figures. The best

results are got in the early cases, and in this connection, it is satisfactory to note that twenty-four of the cases were in infants and children of pre-school age.

Warts.—Only six cases of warts were treated during the year. The results obtained were similar to those of last year. Cases of small multiple warts cleared up in a very few treatments. Large warts took longer. They dried up at the base and fell off, leaving a healthy skin. All the cases were cured.

Septic Conditions.—Satisfactory results were noted in many septic affections, such as boils and severe Impetigo, etc. No doubt the general tonic effect of Sunlight helps considerably in these cases.

Other Conditions treated include cases of Otorrhoea, Rheumatism, Nasal Catarrh, Psoriasis, Alopecia and Dermatitis.